

# Apple2000

THE NATIONAL APPLE USERS GROUP



APRIL 1988

VOLUME 3(2)



# promac the fastest hard disks in the world MacEurope

## promac

All **promac** products share one objective: To be the finest you can buy at any price. No compromises have been made in achieving a thoroughbred design. Meticulous incoming component inspection, careful manufacture and rigorous quality control, comprehensively tested ROM and firmware to enhance performance, and error-free software combine to achieve our objective.

**promac** products are elegantly designed and unobtrusive. They are exceedingly fast and very quiet. With the reliability that comes from superior engineering. They meet or exceed all safety and interference standards.

You owe it to yourself to consider **promac** before accepting any other drive. They represent outstanding value. You can't buy faster or better.

MacEurope supports the full range of **promac** professional products, both internal and external. 20MB, 40MB, 50MB, 80MB, 160MB, 300MB, 800MB SCSI disks, each the leader in its category. WORM/CD-ROM, and the infinite capacity **ProDrive**, utilising removable 10MB floppies. **ProTape** backs up to cassette at 3.3MB/minute. **promac** products are compatible with Unix and all other Macintosh environments.

MacEurope provides engineering, warranty service, support, software updates and advice.

You can see the **promac** range at your MacEurope dealer. If yours doesn't have stock, or you don't have a dealer, please call us. We'll be happy to help. Call us for literature.

**promac** and **ProDrive** and **ProTape** are registered trademarks of **promac GmbH** 5000 Jhr 37 1000 Berlin 12 West Germany.  
Apple is a trademark of and Macintosh a trademark registered to Apple Computer Inc.

(This advertisement prepared by the Robin Ray Partnership on the Macintosh using **JustText** page composition software from MacEurope)

**MacEurope**

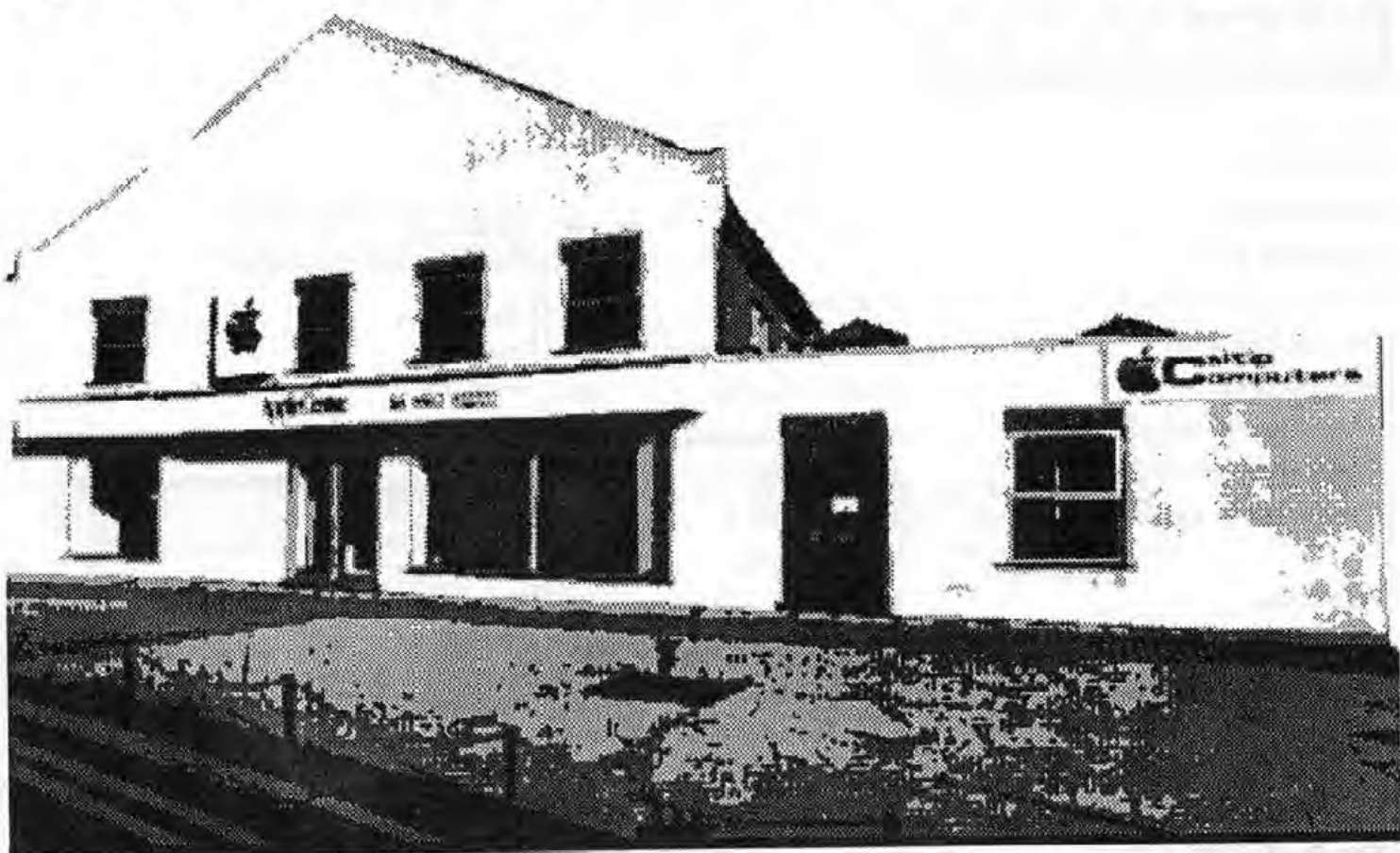
**The Granary, Trowse Bridge, Bracondale,  
Norwich NR1 2EG, England. Tel: (0603) 630636**

**Fax: 0603 630374**



# **The User-Friendly Apple Dealer**

**(But we ain't no wimps)**



**Celtip Computers : AppleCentre**

Lower Mill Street, Kidderminster, Worcs., DY10 2JG Telephone (0562) 822222

# Apple2000

April 1988

## APPLE II

Personal Newsletter	Peter Stark	18
Timeout Series - 1	Audrey Friend	20
Wizardry IV	Len Cavanagh	24
Starglider	Neil Hartley	25
Timeout Series - 2	Peter Davies	26
Apprentice C	Mike Tickle	32
Publish-It!	Peter Stark	35
Cirtech Promdisk Adaptor	Dave Ward	40
Merlin 8/16	Dave Ward	44

## EDITORIAL TEAM

Editor: Jim Panks  
Assistant: Graham Attwood

Mac Editor: Norah Arnold  
Assistant: Irene Flaxman

Advertising: Alison Davies

0733 - 740415

## DEPARTMENTS

Contents	2
Editorial	3
Local Group News	8
Hot Line News	10
Local Group Meetings	12
NewsBytes	13
Omnis Tips	16
Letters	37
Members Small Ads	83

## MACINTOSH

Mac2000	Norah Arnold	48
AlphaPop	Bill Pearce	50
Mac II P.D. Preview	Tom Wright	52
Network News		53
Draw it again Sam	P.D.Demo	58
The Graph Stack	P.D.Stackware	59
MacLibrary	Norah Arnold	60
The Clip Art Stack	P.D. Stackware	64
Findswell for HFS	Richard Wilday	65
Comic Strip Factory	M.Maloney &	
	M.Guillaume	66
MACSQZ	Michael	
	OShaughnessy	68
MacWorld	D & I Flaxman	70
Affinifile	Tom Wright	73
Mind & Computer	Bill Pearce	74
SmartPad	K Chamberlain	78
The Perfect Duo	Norah Arnold	79
MIDI Interface	I & D Flaxman	80
Upgrading the Apple -Pt II	Tom Wright	81

## ADVERTISERS

MacEurope	Inside Front
Celtip	1
Apple UK	4/5
Alphatronics	7
Bidmuthin	7/33
MGA MicroSystems	9/15/25
Cirtech	11
Open-Apple	15
Peanut Computer	17
Comtech	24
Diamond Software	24
Chameleon Software	25
Logica UK Ltd	31
Bidmuthin	
MacLine	42
MacEurope	63/65/67
MacSoft	84
MacEurope	Inside Back
MacSerious	Back Cover



## Time for a rest!

For the last two and a half years I have been editing and compiling the magazine for the club on a temporary basis - hoping that something more permanent could be achieved. This temporary job has in fact accounted for most of my spare time when I have not been working, or carrying out the chairmans duties.

My life has revolved around the club and I have put all my efforts to making it THE user group. I have now decided that I should take a rest and devote more time to my long suffering family. It seemed that the AGM would be the best time for me to announce my resignation so that the new committee can start afresh.

I would just like to thank all those members that have contributed to the journal and helped me make it such a success. I wish all the advertisers every success and thank them for supporting me. I have enjoyed the experience and hope that you will all understand what pressures are involved in producing our bi-monthly magazine..

I am not leaving the User Group circle completely as I am setting up a local group just off the M25 on the Kent/Surrey/London Border. With the same sort of support I hope that this will be a successful venture and give me more time to explore my machine and help other users without the constant pressure of editorial deadlines and the associated problems.

I wish the new team good luck and hope that the membership will support them as they have supported me..



Jim Panks

### FOUNDER MEMBERS AND SUPPORTERS OF THE APPLE USER GROUP COUNCIL

Apple2000™ is a trading name of BASUG Ltd, a non-profit making independent company limited by guarantee. The contents of this journal are copyright of BASUG Ltd and/or the respective authors. Permission is granted for non-commercial reproduction providing the author and source are properly credited and a copy of the relevant journal is sent. The opinions and views expressed are those of the various contributors, and are not necessarily supported by BASUG.

This journal is published bi-monthly by Apple2000 as a benefit of membership in February, April, June, August, October and December. The copy date is the 5th day of the month preceding publication. Advertising rates are available on request.

Apple™ and the Apple logo are trademarks of Apple Computer Inc. Macintosh™ is a trademark of McIntosh Laboratory Inc and used with the express permission of the owner. Telecom Gold™ is a trademark of British Telecom PLC. The FORCE™ and Apple2000™ are trademarks of BASUG Ltd

## Apple2000

P.O.Box 3, Liverpool,  
L21 8PY

### Administration

Alison Davies

Irene Flaxman

0532 710415 (office hours)

0532 710415 (after hours)

### Printer

Old Roan Press 061-227-4818

### Cover Design

Stefan Mucha

### HotLine

Dave Ward

0689 562102

Monday - Friday 1900-2100 hrs

### Local Groups

Tom Wright

0627 710013

### TABBS

Ewen Wannop

0235 743797

For £450  
we'll give you  
a brain  
transplant.



It's a simple operation that will clearly make your Macintosh<sup>™</sup> 128K, 512K or 512K/800 more advanced and a lot faster.

For £450 you now have the opportunity to upgrade to a Macintosh Plus with a full megabyte of memory. All performed efficiently by your Apple<sup>™</sup> Macintosh dealer in a matter of hours.

Just take your Macintosh along to him.

He'll install a Macintosh Plus logic board, 800K Disk Drive and give you System Software which includes MultiFinder<sup>™</sup> and HyperCard<sup>™</sup>. With this special upgrade kit you're fully equipped to take advantage of the most sophisticated software.

You'll also have the means to attach SCSI devices such as an Apple Hard Disk or the new LaserWriter<sup>™</sup> IIsc.

Can you imagine how useful MultiFinder will be? It'll allow you to run a number of different applications in separate windows all at the same time.

Also, run programs in the background while working in the foreground.

Another impressive part of your new Macintosh is HyperCard.

The revolutionary program that enables you to access, customise and create information.

HyperCard is unique because it integrates all types of media, not only text and graphics but sound, animation, voice and video.


Using HyperCard is easy because it's based on the familiar idea of index cards.

All will be explained to you in the manuals we provide with your kit.

If you're interested in progressing to a Macintosh Plus, contact your Apple Macintosh dealer.

He'll provide you with all the information you need and book you in. Or you can dial 100 and ask for Freefone Apple.

As always, when it comes to innovative ideas, Apple are the brains behind them.

 **Apple.™ The power to succeed.**



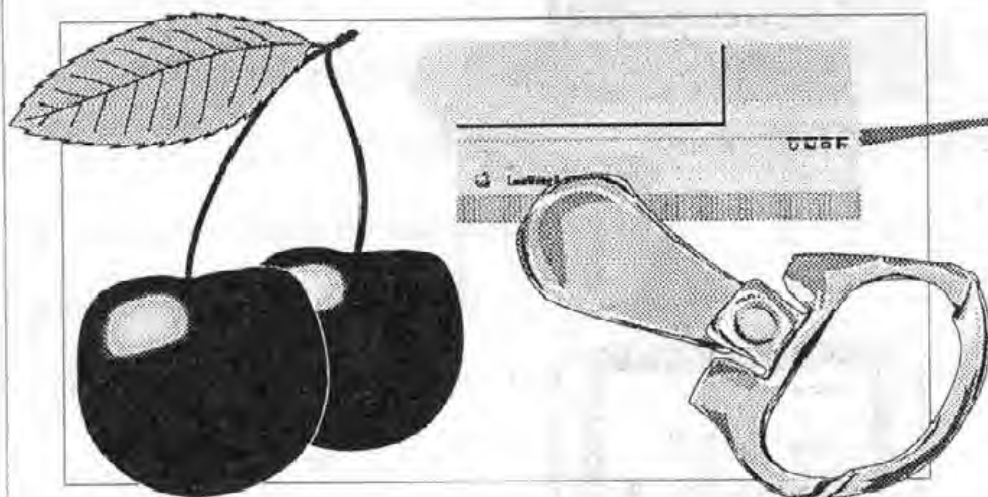
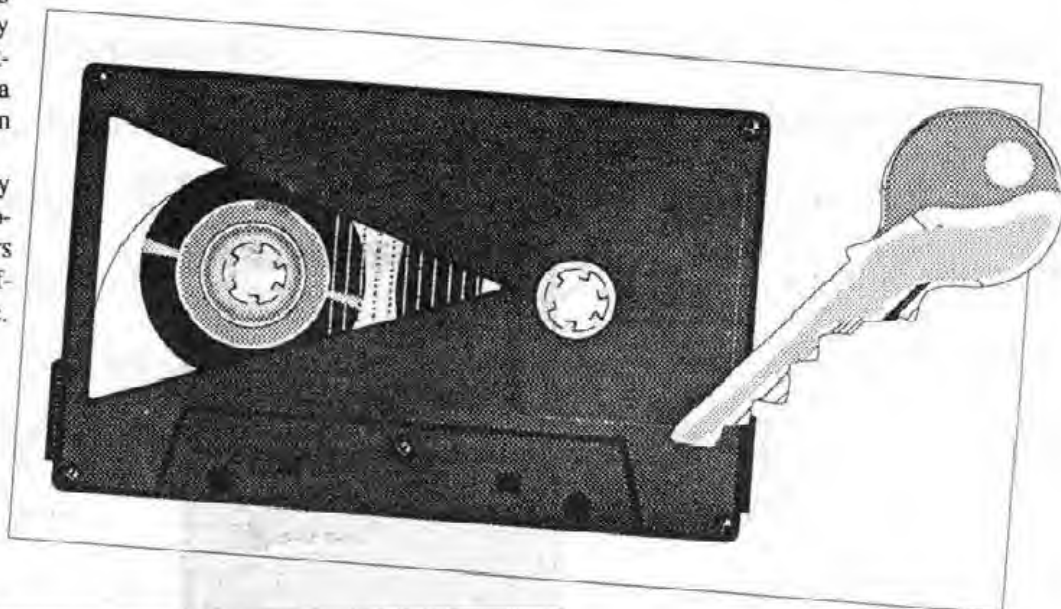
# Preview

## British Macintosh ClipArt

Below is a preview of a major new British collection of Postscript art which is to be release in the next week or two.

It will contain four disks of up to date graphics useful to many DeskTop Publishers. The artwork is totally new and has a British team of artist working on it.

Although we do not see many British Products especially programmes I thought the members would like to see something different and British for a change.



*Examples of the MacLine Art Disks, printed on a LaserWriter with reduction and manipulation to make a pleasing display.*

The collection will be distributed by MacLine and considering the amount of artwork the price of £65.00 + VAT is a fair price. Over four months work has gone into the four disks and although the LaserWriter can not show all the detail, output on a Linotronic is amazing. A lot of work has gone into the shading of each piece of artwork.

This set of disks are all in Encapsulated Postscript so that you can easily use and manipulate the graphics in your desktop publishing application. These have been tried in both PageMaker and RSG4 and work well.

The graphics cover the whole range with only a very small amount being shown here.



Available NOW from MacLine - 4 disk set for £65.00 + VAT.



# ALPHATRONICS

(Please note that all items are compatible with all versions of Apple DOS, ProDOS, CP/M and Pascal unless otherwise stated)

## Floppy Disk Drive

140k half height floppy drive, pancake motor (high quality Japanese XM4 mechanism) this drive is a one for one replacement for the old full height Apple Unit. £89

13/16 sector, twin port disk drive controller £25  
(suitable for use with both standard Apple or half height drives)

## Memory Expansion

16k RAM II/II Europlus/II+ £25

64k/80 COL extended text card IIe £25

## Coprocessors

Z-80 coprocessor card, to run CP/M software £25

## Printer Interfaces / Serial Interfaces

Epson/Centronics incl cable £29

Grappler + compatible incl cable £29

RS232 serial printer card £29

Serial plus card - suitable for use with a modem, with software selection of protocol and full Apple super serial emulation £49

## 80 Column

80 column extended text card for IIe, with 64k memory £25

80 column text card for IIe £19

## Other hardware for II+ and IIe

Heavy duty power supply 7.5A output £49

Add £2 for P&P (Items by carrier £8.95 extra) and add 15% V.A.T.

**ALPHATRONICS**

Alphatronics - Wolverley House - 18 Digbeth  
Birmingham B5 6BJ  
021-643-9866

## FAST, RELIABLE SCSI MASS STORAGE SYSTEMS

for  
Macintosh Plus, Mac SE and Macintosh II  
Apple IIGS and IIe

Selectable Interleave,  
AppleShare and A/UX Compatible

- ✓ Rugged reliable design
- ✓ 20,000 power on hours MTBF
- ✓ Whisper-quiet fan cooled system
- ✓ Platinum Colour

### INTERNAL:

Macintosh II - 40 MB or 80 MB - 29 ms Average Access time

Macintosh SE - 40 MB - 29 ms Access time

**EXTERNAL:** 20 MB to 960 MB Hard Drives

**MacStack:** 20 MB - 65 msec access time

**MacStack:** 40 MB or 80MB - 29 msec access

**TapeStack:** 40 MB SCSI Tape Backup System with Data Compression.

**PowerTower:** 320 or 640 MB - up to 16 MB of Cache - 0.5 ms Avg Access.

All Mac drives include HyperCard, SCSI utilities and HyperCard Stacks.

Also available for Apple IIGS and IIe with host adaptor.

Prices start at just £499.00 for 20Mb.  
Plus Special Offers on DTP Systems,  
Network Systems, Memory Upgrades

**Bidmuthin Technologies Ltd.**  
Brent House  
214 Kenton Road  
Harrow  
Middlesex HA3 8BT

Telephone 01-907 8516

Apple Authorised Resellers  
Level 1 Service Centre  
for Macintosh, Apple II, Mac II, LaserWriter  
*Experts in Apple Expansion*

# Tom Wright keeps us all up to date on the local group scene.

Well it's that time again and I am happy to report that in general the health of local groups appears to be quite good, there is more good news of emerging groups and I am still hoping that somebogy will volunteer to regenerate the Glasgow group.

Ron Hoare, contacted me the other night to let me know about the continuing developments in the 'Apple-Dorchester' area. As a result of Ron's continuous efforts an inaugural group meeting is to be held on May 3rd, the venue will be as listed in the contacts list and all Apple fans will be most welcome. The venue has some Apple II machines there which will be available for anyone who doesn't bring take their own. Please check with Ron before going along to the meeting to ensure that there are no last minute changes of any kind. Apparently Ron has been very busy spreading the Apple word in his part of Dorset both as part of his professional activities and on a personal basis; results are that not only is the educational orchard expanding but some of the people he has spoken to will be going along to the meeting.. My best wishes to the group.

I understand that the revived Liverpool group got off to a good start, do contact them and find out what you are missing. I have to apologise to Irene Flaxman for having given the wrong telephone number in the last issue, the correct number has now been included in the contact list as 051-928-9097. Anyone interested should contact Irene at the number provided to find out more about the group. Users of all Apple machines will be welcome. Good luck to all our members in the area who are joining this new group.

My own involvement with MidApple has reduced a little recently due to the fact that I am no longer able to find time for committee work. The A.G.M., took place at the last club night, followed as usual by the annual 'junk' sale which always includes a high proportion of very good buys

for members. I suppose the fact that I noticed that all items on sale were Apple II related is a reflection of my own moving interests these days. Users of all Apple machines are welcome at MidApple.

I had a very striking reminder of the helpful and friendly nature of user group members the other day when Bob Hall phoned from the U.S.A. As some of you are aware Bob did a lot of work for the Gateway club over at Mildenhall while he was over here, his friendly knowledgeable manner was always a pleasure and his friends missed him when he returned to the U.S.A. Believe my surprise when out of the blue he phoned up to say that he has found a book that I asked him about a year or so ago. What is more he said that he will be back in the U.K., briefly and will bring the book with him! You can't buy that sort of help folks, if you are in the neighbourhood of the Gateway club go along and see them. The members there are all very helpful and nice people. Oops!! while typing this lot I have just found my own membership renewal reminder for the Gateway club, if you are reading this honoured Chairman the money will be in the post this week, honest.

Funny that I was moaning last issue about the lack of activity from Apple U.K., and the User Group Council, well people

who know me will realise that the fact that I was moaning wasn't funny it was the fact that the Council had been resurrected even while I was moaning. With the newly formed committee we will hopefully now see some meaningful action from the council which hadn't previously made much of a showing.

I understand that among other things revealed from a poll of Apple U.K. employees was the opinion that most user groups are heavily into software piracy and that dealers don't like us too much because we rob them of profits by selling disks etc. Now I admit to being unfamiliar with almost all of Apple U.K.'s employees but I do wonder how many of them are members of local groups and where they gained the experience that tells them that there are such a lot of pirates in the groups. Obviously there have been software pirates in ALL areas including I don't doubt several well known companies for many years but it does seem a bit of a check for this sort of accusation to be thrown so lightly.

The bit about user groups doing dealers out of sales also seems a bit strange, I seriously doubt that any Apple dealer would pick up our sales if we stopped selling disks as we sell low priced products to people who in the main wouldn't pay the

## M25 Business Mac Group

A new group for Macintosh Business users will meet every four weeks starting on Wednesday 4th May 1988 at 1900hrs. The meeting place is The Sir Mark Collett Pavilion, Heaverham Road, Kemsing, Sevenoaks, Kent. (5 mins from M25 - *map in last issue*). First meeting will concentrate on general business topics.

All Macintosh Users are welcomed.

More info on 0732 61166 or 01 870 3621



## Local Group News

very high prices that are common for disks from dealers.

One thing that we are certainly not into is the cheap direct import of Apple branded goods from the U.S.A which is an activity that one commercial organisation which Apple U.K see fit to have on the Council does engage in; what is more Apple have even announced that the 90 day U.S warranty will cover goods imported in that manner. Perhaps Apple U.K see organisations robbing dealers of the profit margins from sales of Macintoshes as a good thing?

Many groups have benefited from Mary Ainsworth's visits, and those of her colleagues and I am sure that we are all hoping that those visits will continue to provide us with excellent product demonstrations, but, I would like to think that Apple U.K haven't forgotten that most of the users who have seen their demonstra-

tions have already bought properly imported Apple equipment at profit to both the dealers and Apple U.K., and will do so again.

The vast difference in approach to user groups between Apple Inc., in Cupertino and Apple U.K., continues to be a source of concern for many of us. The excellent Apple User Group Connection Newsletter which is published in the U.S.A will hopefully be one of the things that jogs the memory of the new council members while they are busy developing whatever is going to emerge. Believe it or not, my personal thanks to Apple U.K as well as the recently elected Council officers for the work that is being done.

I'm not sure whether or not the next bit belongs in this column but I can't resist mentioning the fact that Apple2000 now has David Szetela, Manager of Apple Computer Inc., Developer services listed

as a subscribing member. The arrival of David's letter was one of the things that cheered me up during my recent spell of wrestling with crutches and walking sticks.

By the time this column next appears I expect to see another group listed. Apparently during the recent workshop at Kemsing several users were very keen to start another group so we should soon see yet another addition to the circle of friends.

Please remember that if you are thinking of starting a group and want help we will help where we can. I am still in process of getting ready to move house so if you have any difficulty reaching me that will be the reason, Irene Flaxman will help pass on messages if necessary (see contacts listing). Until the next issue.

# Publish-It!™ in less than an hour.

Introducing **PUBLISH IT!** A full-featured, fully integrated desktop publishing powerhouse with word processing, page layout, and graphics!

For all of its state-of-the-art ability, **PUBLISH IT!** is incredibly easy to learn—refreshingly so. **PUBLISH IT!** combines the familiar Macintosh User Interface, Timeworks Quick-Start Mini-Manual, a full complement of Help Screens, and the practical **WYSIWYG (What-You-See-Is-What-You-Get)** display—all designed to get you up and running in less than one hour!

### SPECIAL FEATURES:

**Macintosh User Interface:** Pull-down menus, icons, scroll bars and dialogue boxes help you learn and use the program quickly.

**Flexible Page Layout:** You can overlap, reposition, resize, and reshape text, columns and graphics.

**Built-In Fonts:** Over 1280 possible type-style combinations. Opt for bold, italic, underlined, outlined, shadow, and superscript or subscript characters. Type sizes range from 9 to 72 point.

**Premium Quality Printouts**

**Built-In Word Processor:** All the features necessary for everyday word processing, plus most of the sophisticated ones found only in more expensive programs.

**Text Importing:** Load documents from APPLEWORKS, BANK STREET WRITER\* or any other word processor in standard ASCII format directly into **PUBLISH IT!**

**Graphics Importing:** Directly import graphics and illustrations from any standard Apple single- and double-high resolution drawing program—including Broderbund's DAZZLE DRAW. Then crop and size to fit.

**Built-In Graphic Toolbox**

**Special Typesetting Functions:** Includes kerning and leading.

**Automatic Text Flow and Word Wrap:** Automatically flows text from column to column on the same page, or carries it over to subsequent pages.

**Multiple Page Views:** View, edit and layout pages at actual, double, or half-size.

**Plus, you get worksheets, sample documents, special timesaving features, and much more!**

Available for:

- Apple IIc, IIe, IIGS
- IBM PC & Compatibles

**£99.95 incl. p&p/VAT**

**MGA Microsystems**  
Pear Tree,  
Appledore,  
Kent TN26 2AR  
(0233) 83571



**NOW SHIPPING**

## Hot Line News

Many members who have contacted the Hotline have expressed the view that there could be more articles etc. on Apple // computing. On the other hand many members that I talk to seem to have some unique knowledge of a particular Apple // program that would appear to be of interest to many other users. The solution to the problem of lack of Apple // computing articles seems simple! In fact if you send in enough Apple // stuff the meagre results of my lucubration could be committed to balaam !!

The inclusion, in the Hotline News last time, of the complaint regarding the Apple IIs upgrade chips was rather unfortunate since many members contacted me to say that they have had their machines upgraded a few days prior to the appearance of Apple 2000 magazine. It's a pity that this article has to be written before it appears and may be at least 4 weeks out-of-date. The fact remains, however, that we have had to wait many months without, apparently, any official word. The answer seems simple; Apple Computer (UK) should state their position at the outset even if the news is bad! After all they have probably got perfectly good reasons for apparently holding-back.

Some members who have contacted me regarding the 'date' problem with ProDOS version 1.1.1 seem to think that this is due to a bug and inculcate Apple Computer. Actually nothing could be further from the truth. When ProDOS was introduced Apple programmers incorporated into it a little routine that would provide the year for those clock cards that did not provide such information. Most clock cards fall into this category, incidentally.

This routine can only work for 6 years at most and it seems impossible that a better one could be devised. The early versions of ProDOS work from 1982 through 1987 and 1988 will therefore appear to the algorithm as 1982! Although Apple Computer haven't advertised this as a potential problem they have updated ProDOS and the later versions have been adjusted to work until 1991. The best answer is to get the latest version of ProDOS V1.4 from your dealer or elsewhere. Alternatively, if you must for some reason still use an old version of ProDOS that only works until 1987 please see Hotline News in Apple 2000 magazine, February 1988, for the patch.

One of the difficult areas is interfacing AppleWorks with printers. Since many

Apple // computer users choose AppleWorks we get a lot of enquiries regarding such interfacing problems. If you have had problems with interfacing AppleWorks with a particular printer which now works please let us know how it was done as it might save others many hours work.

Martin Lawrie of FREELAND wrote to us regarding publishing programs for the Apple ][ plus and look-alikes but the address on the letter was insufficient to enable us to write and I don't have access to the membership database. Unfortunately I don't know of any publishing programs that work on the Apple ][ plus. Programs such as Publish It are very new and require at least an Apple //e 128K. If anyone knows better please let us know.

Dave Ward is the Apple2000 Hot Line Manager and he is our front line man for queries of a technical nature. If he can't help you he is sure to know someone who will. Please HELP Dave by calling between 7 p.m. and 9 p.m. - queries outside these times can be left with the Administrator on 0773 744041 and will be dealt with as soon as possible.



## APPLE 2000 ARE PLEASED TO ANNOUNCE SOME ADDITIONS TO THEIR SHOP 2000 RANGE



### LOCKABLE DISK BOXES

PLASTIC BASE WITH SMOKED BROWN LID

3.5" / 40 disks £8.99

3.5" / 80 disks £9.99

5.25" / 50 disks £8.99

5.25" / 100 disks £9.99

### LASERWRITER II CARTRIDGES

For the NEW Apple LaserWriters

£85.00 each

### NEOPRENE MOUSE PAD

8.5" x 10.5" APPROXIMATE SIZE

£4.49 each

**ALL THESE PRICES ARE INCLUSIVE OF V.A.T. AND POSTAGE**





# plusRAM-16

## The Power to Expand

### ADD ONE TO SIXTEEN MEGABYTES TO YOUR APPLE

**plusRAM-16** is the newest RAMDisk card from CIRTECH, designed to let your Apple keep right on growing! **plusRAM-16** plugs into any standard slot in your Apple II+, IIe or IIGS, and comes complete with one megabyte of memory ready installed. It is fully socketed to allow you to plug in extra RAM chips when you need more memory, right up to sixteen megabytes.

**plusRAM-16** is a RAMDISK card which works just like an incredibly fast disk drive, to make programs operate at electronic speeds. It's like having instant access to all your data!

- **plusRAM-16** is automatically used by AppleWorks for desktop expansion. It's also supplied with lots of extra-special enhancements for AppleWorks (vers. 1.3 & 2.0 US):

- A full function calculator which pops up instantly on the screen any time you need to use it.
- A massive 42K print buffer which can be assigned to any printer.
- Lets you use your AppleMouse for full cursor control and menu selection.
- Automatic saving of large desk-top files to multiple disks.
- Onscreen date and time display (from any ProDOS compatible clock).
- Lets you run AppleWorks 1.3 on the II+ (with 16K language card and 80 column card).

- **plusRAM-16** uses custom logic circuits and advanced design to give high reliability and much lower power consumption in your Apple than other RAMcards.

#### TOTAL MEMORY CONTROL WITH THE RAMDESK MANAGER

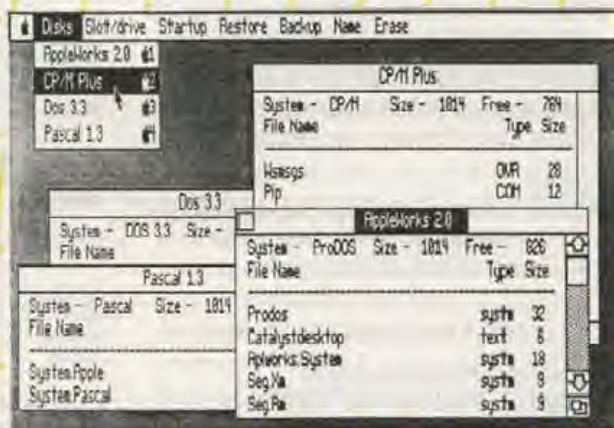
The RamDesk Manager, with its Macintosh-like window environment, lets you divide the huge plusRAM-16 memory into several independent RAMDisks from a choice of six different set-ups. Each RAMDisk can be used to store different programs or operating systems. To save time when copying programs into a RAMDisk, you can use the special RamDesk Manager restore function which can load a complete floppy disk in under 12 seconds! You can easily move from one RAMdisk to another and when you use one RAMDisk, the others are "invisible". Any sequence of RamDesk Manager functions can also be set to execute automatically each time the RamDesk Manager is booted to save you even more time!

- **plusRAM-16** is supplied with the unique **RamDesk Manager** which lets you control all that extra memory so you can change instantly between programs as often as you like, without having to use slow drives.

- **plusRAM-16** is supported by more software than any other RAMcard; ProDOS, Pascal 1.3 and Cirtech CP/M Plus automatically recognise plusRAM-16 and full support is included for DOS 3.3, CP/M 2.20b/2.23 and Pascal 1.1/1.2.

- **plusRAM-16** is designed to observe Apple standards to guarantee maximum compatibility.

- **plusRAM-16** is easily expandable using standard RAM chips; from one to four megabytes with one megabit chips, and up to sixteen megabytes with forthcoming four megabit chips.



The plusRAM-16 in this example has been set up using the RamDesk Manager to have four different RAMDisks: AppleWorks, DOS, Pascal and CP/M Plus. The graphics RamDesk Manager shown is for use with the enhanced 128K Apple II and Apple IIGS. A text version is also supplied for use with other models.

# plusRAM-16

**ALL THE POWER YOU'LL EVER NEED - £229.00**

*plusRAM 16 is just one of the comprehensive range of CIRTECH RAMcards and storage devices:*

#### plusRAM-1

If you don't need more than one megabyte, then plusRAM-1 is the card for you! With all the same features as plusRAM-16, it comes with 256K of RAM and is expandable to one megabyte. (RamDesk Manager requires a minimum of one megabyte.)

*from only £99.00*

#### plusRAM-GS2 and -GS8

RAMcards specifically for the Apple IIGS memory expansion slot to add up to 8 megabytes of extra memory. Complete with powerful AppleWorks enhancements and the facility to instantly boot programs with the PROMDisk and ROMDisk Adaptors

*from only £99.00*

#### plusDISK

A major advance in storage technology, **plusDISK** is unmatched for sheer speed and performance - all the speed of a RAMcard and the permanent storage of a disk drive. Supplied with 128K and expandable to 1 megabyte, fits any standard slot in a IIGS, IIe or II+.

*from only £128.00*

*Contact Cirtech for full information on these exciting products and details of special trade-in/trade-up offers available.*

*(Prices exclude VAT)*

**CIRTECH (UK) LIMITED, Currie Road Industrial Estate, Galashiels  
Selkirkshire, Scotland, TD1 2BP**

**Telephone (0896) 57790**

**Telex 265871 (Attn. 84:CPD001)-Telecom Gold**

**Source Mailbox-AAH555**



© CIRTECH (UK) Limited 1988 Apple II+, IIe, IIGS, ProDOS, DOS 3.3 and AppleWorks are registered trademarks of Apple Computer Inc. CP/M is a registered trademark of Digital Research Inc.





## Local Group Meeting Details

### NEW GROUPS STARTING UP

#### M25 BUSINESS MAC GROUP

Contact Jim Panks Tel: (01753) 431999  
Venue Sir Mark Collett Pavilion, Heaverham Road, Kemsing, Sevenoaks, Kent.  
Meets First meeting 4th May at 1900hrs  
Next meeting 1st June at 1900hrs

#### LIVERPOOL APPLE USER GROUP

Contact Irene Flaxman Tel: (0151) 422411  
Venue Check with Irene  
Meets 2nd Monday of each month. Check with Irene for news

#### DORCHESTER

Contact Ron Hoare Tel: (01308) 455555  
Venue Newton Magnus & Co., Arrowsmith Court Station Approach, Broadstone  
Meets FIRST MEETING May 3rd, at 7.30pm  
PLEASE let Ron know that you are going before the date of the meeting so that he can update you on arrangements if necessary.

#### DONCASTER - SOUTH YORKSHIRE

Contact Colin Withington Tel: (01924) 320001

#### LEEDS

Contact Bob Miller Tel: (0113) 2741234  
T.Veluppillai Tel: (0113) 7541004

### ACTIVE APPLE DEDICATED GROUPS

#### APPLE II PROGRAMMERS CLUB

CONTACT Philip Dixon TEL: (01484) 400000  
VENUE None — operates as a postal group via a monthly newsletter.

#### BENTWATERS APPLE USER GROUP

CONTACT John Thomas Tel: (01223) 477000  
VENUE R.A.F. Woodbridge  
MEETS 7.00pm first Tuesday of each month

#### BRISTOL GROUP (B.A.U.D.)

CONTACT MIKE FARMER Tel: (0117) 401177  
VENUE Decimal Business Machines, Three Queens Lane, Redcliffe  
MEETS 7th of each month, or the Friday nearest if the 7th falls on a weekend.

#### BURNLEY APPLE USER GROUP

CONTACT Rod Turnough Tel: (01773) 444444  
VENUE Michelin Sports Centre  
MEETS 2nd Wednesday of each month

#### CAMBRIDGE APPLE USER GROUP

Contacts I Ian Archibald Tel: (0223) 411111  
Mac Richard Boyd Tel: (0223) 411111  
Venue Parish Hall of St Mark's Church, Barton Road, Cambridge.  
Meets Fortnightly will alternate between Apple II and Mac Example dates are Mac 3-2-88 Apple II 17-2-88. Check with Ian or Richard

#### CROYDON APPLE USERS GROUP

CONTACT Graham Attwood Tel: (01889) 444444  
VENUE 515, Limpfield Road, Warlingham, Surrey  
MEETS 7.30pm on the third Thursday.

#### EAST MIDLANDS MAC USER GROUP

CONTACT Nick Helm Tel: (0115) 244444  
VENUE Wilford Cricket & Rugby Club, Nottingham  
MEETS 8.00pm on the first and third Wednesday

#### EDINBURGH GROUP

CONTACT Ricky Pollock Tel: (0131) 337-1733  
VENUE Proteus Micro Systems, 55, Frederick Street, Edinburgh, EH2 1LH  
MEETS Monthly, check with Ricky.

#### ESSEX GROUP

CONTACT Pat Bermingham Tel: (0206) 221111  
VENUE The Y.M.C.A., Victoria Road, Chelmsford  
MEETS Third Friday of every month

#### GATEWAY COMPUTER CLUB

CONTACT Phil Herberer Tel: (01904) 333333  
VENUE Bob Hope Recreation Centre, R.A.F. Mildenhall  
MEETS AMS conference room, Mildenhall base. Normally at weekends, check with Verne.

#### HANTS & BERKS GROUP

CONTACT Mike Hollyfield Tel: (0753) 780001  
VENUE Thames Valley Systems, 128 High Street, Maidenhead, Berkshire, SL6 1PT  
MEETS 7.00pm on the second Monday.

#### HERTS & BEDS GROUP

CONTACT Norah Arnold Tel: (0494) 577000  
VENUE The Old School, 1, Branch Road, Park Street Village, St Albans, Herts.  
MEETS 8.00pm on the first Tuesday.

#### KENT GROUP

CONTACT Richard Daniels Tel: (01892) 510000  
VENUE Microspot 5-11, London Road, Maidstone.  
MEETS 7.30pm on last Monday of each month.

#### LONDON APPLE II COMPUTER CLUB

CONTACT Chrs Williams Tel: (01) 400-10000  
VENUE Studio 8, Wharfedale Projects, 47, Wharfedale Road, London, N1 9SE  
MEETS 6.00pm, first Wednesday of every month.

#### LONDON MACINTOSH GROUP

CONTACT Maureen de Saxe Tel: (01) 400-40000  
VENUE Room 683, London University Institute of Education, Bedford Way, London, WC1  
MEETS 6.00pm on the second Tuesday.

#### MACTAFF - SOUTH WALES MAC GROUP

CONTACT Lorraine Thornback Tel: (01495) 444444  
VENUE Apple Centre South Wales, Longcross Court, 47 Newport Road, Cardiff  
MEETS 7.00pm on the first Thursday.

#### MIDAPPLE

CONTACT Tom Wright Tel: (0121) 411111  
VENUE I.T.E.C., Tildasley Street, West Bromwich.  
MEETS 7.00pm on the second Friday.

#### SOUTH EAST ESSEX MAC GROUP

CONTACT Mick Foy Tel: (01702) 444444  
VENUE D.P.S., Acorn House, Little Oaks, Basildon, Essex.  
MEETS First Monday of every month

#### THE MIDLAND MAC GROUP

CONTACT Ivan Knezovich Tel: (0121) 411111  
VENUE Spring Grove House, West Midland Safari Park, Bewdley, Worcestershire.  
MEETS 8.00pm on the first Tuesday.

#### THE NORTH EAST APPLE USER GROUP

CONTACT Philip Dixon Tel: (0191) 400000  
VENUE AppleCentre North East, Ponteland Road, Ponteland, Newcastle-upon-Tyne  
MEETS First Wednesday of every month

#### THE NORTH WEST APPLE COMPUTER CLUB

CONTACT Jim Rosco Tel: (0161) 400000  
VENUE Horse & Jockey Pub., Winwick Road, Warrington  
MEETS First Monday of every month

#### POOLE MACINTOSH USER GROUP

CONTACT David Huckle Tel: (01204) 444444  
VENUE Devenill Computers (Dealer) Itec House, 34-40, West Street, Poole, Dorset, BH15 1LA  
MEETS Four times per year.

#### SOUTHAMPTON

CONTACT Geoff Parson Tel: (0703) 4771111  
VENUE January meetings were on the 8th and 22nd Contact Geoff for details.

### MULTI-INTEREST GROUPS WITH APPLE USERS AMONG THE MEMBERSHIP

#### CREWE COMPUTER USERS CLUB

CONTACT Paul Espartero Tel: (01273) 444444  
VENUE Christ Church Hall, Crewe  
MEETS Fortnightly, Fridays, 7.30pm to 10.00pm

#### LEICESTER GROUP

CONTACT Bob Bown Tel: (01533) 477000  
VENUE Shakespeare Pub, Braunstone Lane, Leicester  
MEETS 7.30pm to 10.0pm on first Wednesday.

#### THE NORTH WEST APPLE USERS GROUP

CONTACT Max Parrot Tel: (0161) 400000  
VENUE Day House (2nd floor), University of Manchester, Institute of Science and Technology, Sackville St, Manchester.  
MEETS 8.00pm on the 3rd Thursday of month

#### WEST MIDLANDS AMATEUR COMPUTER CLUB

CONTACT John Tracey Tel: (0121) 400000  
VENUE Hill Crest School, Simms Lane, Netherton, Near Dudley.  
MEETS 7.00pm on the 2nd & 4th Thursday.

### APPLE DEDICATED GROUPS IRREGULAR ACTIVITY

#### FURNESS AREA

CONTACT Alan Curtiss Tel: (01229) 444444  
NOTE There has been more activity in this area recently, I have been unable to contact Alan for some time so check with him yourself.

### APPLE USERS IN CONTACT NO ORGANIZED GROUP

#### HARROGATE AREA

CONTACT Peter Sutton Tel: (01434) 444444  
A number of keen Apple users in contact with each other.

## MacSerious gets serious.

The MacSerious Company have taken action to stop the grey importing of software that they are official U.K. distributors of.

In a strong message to those that engage in this activity Jim Mangles, Managing Director of the company has written informing infringers that he will take legal action if they do not stop.

MacSerious has not done this in an attempt to keep prices up because in a statement to Apple2000 Jim Mangles states that the prices of software from his company will now be only 10 to 15% over the dollar price. The reason for this is the import and transportation costs.



## MacWorkStation announced.

Apple Computer have announced the release of a set of development tools to allow easy connectivity between IBM, mainframes and minis and the Macintosh. The three new products are MacWorkstation, MacAPPC and a Coprocessor platform.

MacWorkstation will allow Macintosh applications to be produced on a host machine without the programmer knowing the Macintosh programming techniques. The Mac can then be used as an intelligent host terminal, with applications running on the host machine. MacWorkstation is shipping now at a price to in-house corporate users for a cool \$2,5000. Developers can have a licence for just \$5,000.

MacAPPC will enable Mac developers to communicate with IBM micros, mini and mainframe computers. MacAPPC will allow communications with any machine which uses the LU 6.2 protocols.

This is another step in Apple's attempt to woo users of other operating systems and is a welcomed addition.



## Price tumble on Mac Products.

Apple Computer UK have announced new pricing on the Macintosh range. The new prices came into effect on 25th January but were too late to put in the last issue.

### Macintosh II Prices.

With single 800k drive £2995

With internal 40MB drive £3795

### Macintosh SE Prices.

With twin 800k drives £1995

With internal 20MB drive £2595

Macintosh Plus £1495

### Other Products.

Tape Backup 40SC £1195

Apple 13" Colour Monitor £695

External HD20SC Drive £795

External HD40SC Drive £1295

External HD80SC Drive £1995

Internal HD20SC Drive £695

Internal HD40SC Drive £995

Internal HD80SC Drive £1795

For a full price list of all Apple products contact your local Apple Dealer.



## Early Times

Early Times is Britain's first quality newspaper for young people and it is produced on the Macintosh.

The cover price of 50p brings a lively quality newspaper with editorial aims of both informing and entertaining the 8-14 year old age group.

The editorial team headed by Carole Woodford use Macintosh DTP solutions to write and produce the finished artwork. The content of the newspaper includes news, sport, music, computers, model making, DIY, games, fashion and many special features aimed at informing without talking down to the young reader.

The issue sent with the press information was impressive and contained most of what was promised. Early Times is available from most newsagents.



## Blyth win top honour.

Byth Software have been awarded the British Design Award for Omnis 3 Plus. The British Design Council Award judges chose Omnis 3 Plus largely because of the careful attention paid to the details of its design. The judges were particularly impressed by the way it exploits the facilities of the Macintosh for which it was designed. The software manuals, sales literature and product packaging also received a mention. Niroo Rad, Blyths Sales and Marketing Manager has the following words of encouragement to Omnis Users and potential users "We listen to what our users say and operate a formal system - using Omnis 3 Plus, of course - to record and identify the needs of our users. The 'wish' list is a vital ingredient in the process of developing new and improved products".

Blyth Software have one of the best user support programmes in the software market and combined with excellent software deserve this award for British excellence in an international market.

Apple2000 is run on Omnis 3 Plus and we are proud to have Blyth as an Apple2000 Recommended Dealer.



The latest member of the group is Apple Computer Inc. We have received a request for a subscription and of course are delighted to oblige.

The list of members grows daily and having Apple Inc join such honoured members as Steve Wozniak makes us feel it's all worthwhile.



## NewsWANTED

Dealers, Distributors etc send us your press releases and news.





## QuickKeys now updated

CE Software have released version 1.1 of the superb utility reviewed in the February issue of Apple2000.

The new features now make it easier to use and you need not go into the Control Panel to create macros. This major update has answered some of the user feedback.

It just shows that some software publishers can respond quickly to users needs and suggestions. CE Software have made a lot of friends in the Mac World and by this sort of response they will certainly make many more.

The new QuickPanel allows the user to make macros from within any program without waiting for the Control Panel which can take a while if you have a large complicated System. You can also cut, copy and paste macros which can be helpful when creating separate sets for individual programs.

QuickKeys has risen in price slightly but still remains one of the best value for money utilities around today.

For more details and current price ring MacLine on 01-642-4242

## New Mac Mag launched

The latest magazine to hit the streets for all Macintosh Business users is called Apple Business and is published monthly by International Magazines plc. It is not going to replace MacUser but the first issue did show some promise, it is very glossy and fairly well presented. If you wish to receive a copy why not drop International Magazines a line and ask to be included on the free subscriber list.

The address is:  
International Magazines plc.  
Kiln House, 210 New Kings Road,  
London SW6 4BR

## No sign of new software house - will Claris find a U.K. home ?

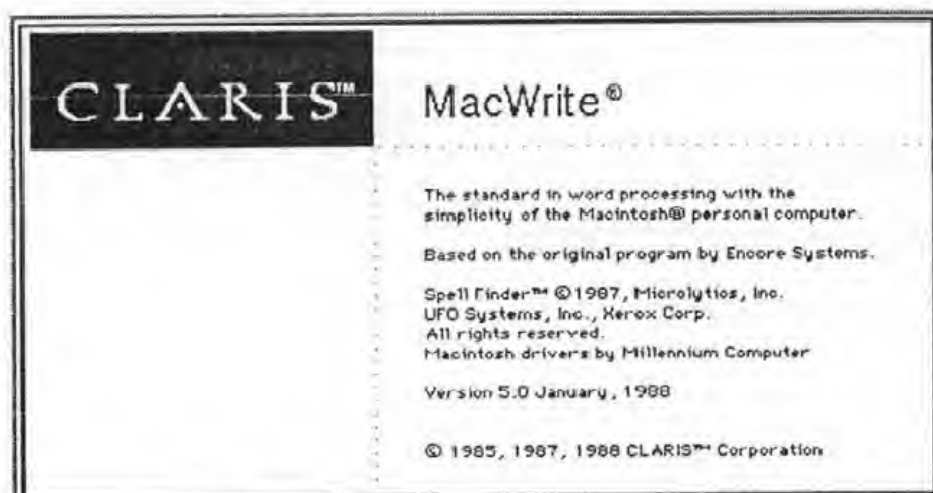
Claris still have not found a distributor for the new Apple software which is being released shortly. Although they had a big launch recently the distribution in the U.K. is with Apple U.K.

Rumours of heat being generated between P:P Micro Distributors and MicroSoft over Claris have been denied but still we wonder who will be given the job. The latest rumours are that Claris may set up its own distribution channels. That would appear to be the most expensive option but

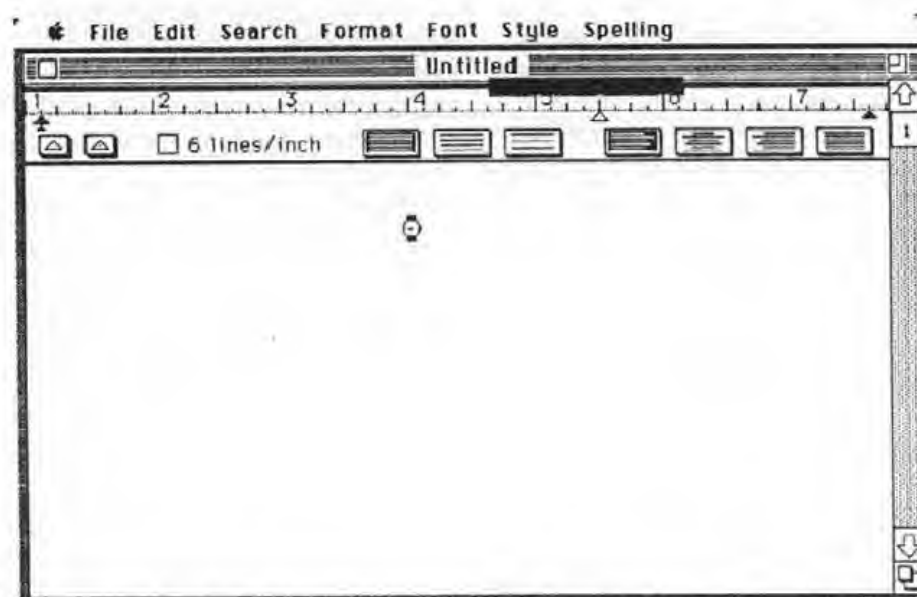
something needs doing shortly or we will be left in the same old situation of waiting months for new software.

The new updated offerings include MacWrite 5.0, MacDraw Plus, MacProject and a new MacPaint. MacWrite 5.0 includes an interactive British Spelling Checker and MacDraw Plus has a layer system which will help when drawing complex artwork.

Expect to see these new goodies by the middle of the year.



New for the Macintosh - Claris MacWrite Version 5.0



# TABBBS

## The Apple Bulletin Board System

We are now into the second glorious month of the Tabbs Bulletin Board. Bringing you the best of Apple II, Apple IIgs, Macintosh and Lisa. With news views and public domain software.

Tabbs comprises a full public and private message system, complete with specialist areas for all Apple machines. Tabbs also includes debating areas, help files, and a full up-downloading file area. We want to help you get the best of your machine, modem and programs. Give us a ring, we are only a simple phone call away, day or night.

We service the European Apple community.



TABBBS Sysop - Ewen Wannop

24 hours on V21 V22 V22 bis V23 8N1

**(0225) 743797**

### POWER WITHOUT THE PRICE



£59.95



**AppleWorks power without AppleWorks price!!!**

Trio offers three essential programs on a single disk: a powerful word-processor, a simple-to-use spreadsheet, and a flexible database. And because Trio is integrated, you can move data from one program to another.

Now you can insert spreadsheet figures into reports, or merge letters with mailing lists; combine research with statistical information, or insert data into form letters.

Trio is available for Apple IIe 128K, IIc (ProDOS based)

**WYSIWYP**

What you see is what you pay:-  
price includes UK postage/VAT.

Export price £50.39

E.&O.E.

**MGA MicroSystems**

PEAR TREE,  
APPLEDORE,

0233-  
83571

KENT TN26 2AR

## Clarity



**Open-Apple** is Tom Weishaar's monthly newsletter for knowledgeable Apple II users. It's thin but packed tight with Apple II lore, humor, letters, tips, advice, and solutions to your problems. Compared to other Apple II publications, **Open-Apple** has the highest new-idea-per-issue ratio, the clearest writing, the funniest cartoons, the longest index, the best warranty (all your money back if you're not satisfied), and it takes up the least shelf space.

### II cue #49

All of the new Beagle Bros *Timeout* series of AppleWorks enhancements are good. *UltraMacros* is incredible. But *Quickspell* is a work of true genius. What makes it so good is its user interface. After checking three dictionaries, it gives you a list of all words it couldn't find. You can select which words to ignore, which to fix, which to add to your custom dictionary, and which to look at in context. For more, see the February 1988 **Open-Apple** page 4.3.

### From our fan mail:

"Lee Raesly directed questions and added his input to a panel of four Apple II stalwarts....A brief recounting of their answers may be of interest to many of you."

#### Q. What magazines are available?

A. WAP Journal, A+, AppleWorks Journal, Byte, Call Apple, inCider, Open-Apple, Nibble, [After WAP Journal Open-Apple was the unanimous favorite.]

Washington Apple Pi Journal  
Washington D.C., January, 1988, page 10

**Open-Apple**

POB 7651, Overland Park, KS 66207

### Try two months free!

Offer good one time only. Try **Open-Apple** at our expense. Cut out or photocopy this coupon and mail it to us for a free two-month trial subscription.

Ad code: M2B2

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Free airmail worldwide

## Printing Problems

Compiled by Blyth Technical Support

### Print Record - How to get the last page?

**Problem:**

The last page in a report doesn't get printed when using 'Print Record'.

**Cause:**

Omnis doesn't know that the report has been completed, and is still busy assembling the next page of output.

**Solution:**

You have to execute a 'Print Totals' command to let Omnis know your report is done. 'Print Record' just takes a snapshot of the Current Record buffer using the currently selected Report format.

Whether you use it to print single records, or many records in a loop, a 'Print Totals' is necessary to force the printing of the last record/s, the Totals section (if any), and the issuing of the final form feed.

### Printing across the page.

**Problem:**

In the Report parameters window, Omnis won't allow you to specify more than one record across the page.

### LaserWriter hangs after a few records!

**Problem:**

The LaserWriter only prints some of the records in a selective report, then hangs.

**Cause:**

The LaserWriter timed out while Omnis was searching for the next record that matched the search criteria. (Older LaserWriter drivers have shorter timeouts.)

**Solution:**

Specify a sort order for the report format. This doesn't slow the report printing appreciably, and eliminates the delays between records. Omnis doesn't need to sort indexed fields, so if the field you sort on is indexed, you will need to specify a second sort field as well. (i.e. a two-level sort)

**Cause:**

'Columns per record' multiplied by 'Records across page' has to be 240 or less.

**Solution:**

Reduce the 'Columns per record' value.

### Printing reports to the LaserWriter

**Problem:**

Printing a report to the LaserWriter causes a system bomb..

**Cause:**

Omnis saved job and page setup information from the printer driver with each report format when it gets created. Because Apple's LaserWriter drivers are not always upwards compatible, when you upgrade to a later version of the driver, the report crashes because of version-specific code that was saved before.

**Solution:**

Ensure that Omnis regenerates the report info using the new driver. Do this by go to the report parameter screen, selecting both Job and Page Setup in turn, and hitting OK for each.

### AppleTalk ImageWriter Printing

**Problem:**

The system bombs during printing to an AppleTalk ImageWriter. Specifically, the second report of the day causes a system crash.

**Cause:**

Version 3.24 and earlier versions require you to print with fonts whenever you print to the AppleTalk ImageWriter.

**Solution:**

Get an upgrade to version 3.25.



# PEANUT DEALS FOR YOUR APPLE

## PLUG IN CARDS

**80 column** for II+ with built-in softswitch, auto 40/80 switching with inverse video chip ..... £38.00  
**80 column 64K** extended for //e lowest ever value ..... £26.00  
**Disk drive controller** runs 13 or 16 sector disks automatically ..... £26.00  
**16K RAM card** ..... £29.00  
**Print-buffer card**, 32K, including cable ..... £59.00  
**PAL TV colour**, composite VHF TV signal and monitor outputs ..... £42.00  
**Z-80 card**, runs all CP/M, lowest ever price ..... £29.00  
**IC tester**, plugs into remote ZIF socket, tests over 500 74 and 4000 IC's ..... £99.00  
**Memory chip tester** similar to IC tester but tests all common memory chips and programs EPROMS and PROMS ..... £119.00  
**EPROM programmer**, programs all EPROMS up to 64K. Compares, verifies, copies, reads, ROM based software included ..... £47.00

## SPECIAL OFFER

WHILE STOCKS LAST

**Clock card** II+, //e DOS 3.3/ProDOS/Pascal compatible, Mountain compatible, made in UK, outstanding value ..... £29.00

## MONITORS

**Philips monitor** 80 12" screen  
 green ..... £79.00  
 amber ..... £85.00

## CIRTECH RANGE

DISCOUNT PRICES

**Champion printer card** including cable ..... £39.00  
**Champion printer card + 64K buffer** ..... £89.00  
**Cache box** 256K buffer parallel ..... £160.00  
**PlusRAM Xtra** 1Mb ..... £189.00  
**80 column** for //e with 64K mem ..... £39.00  
**Z-80 card** ..... £39.00  
**//c Z-80 module** for CP/M ..... £54.00  
**256K Memory card** expandable to 1Mb ..... £89.00  
**NEW! PlusDISK** 128K RAMdisk expandable to 1Mb. Very fast, permanent storage ..... £99.00  
**CP/M Plus system** ..... £99.00

## PRINTERS

**Epson LX800** printer 180cps, 25 NLQ incl tractor ..... £245.00  
**Epson EX800** printer 300cps, 50 NLQ ..... £485.00  
**Brother 1509** ..... £449.00  
**Panasonic 1081** ..... £189.00

## SECOND HAND

Limited second hand equipment with guarantee. Ring for details.

## HARDWARE

**Disk notcher** ..... £4.95  
**Disk storage box** (100 disks) ..... £12.95  
**Tilt/swivel monitor base** 12" ..... £12.95  
**Monitor top** File tray ..... £7.95  
**Joystick** all metal, self centring, fine trim, II+ or //e, state which ..... £19.50  
**ASAD Super Joystick**, fits IBM or Apple, self centring, fine trim ..... £24.50  
**Power Supply** 7.5A heavy duty ..... £69.00

## DISKETTES

**Peanut diskettes**, Fuji-brand SSDD top quality 5 year guarantee, packs of 10 (add £1.00 carriage) ..... £13.95  
**25 pack unbranded SSDD**, factory tested disks ..... £22.50  
**FREE!! Disk notcher** with any 3 packs of diskettes ordered.

**Disk Drive** double-sided, double-density, 640K capacity, inc. patch s/w for Pascal 1.1, CP/M 56, CP/M 60, ProDOS 1.1.1, Diversi-DOS, DOS 3.3. Runs from standard controller ..... £270.00

## SOFTWARE

We stock and support many software packages for the Apple at discounts. Please ring for a price on the package you require!

- Plug in cards
- Hardware
- Printers

- Monitors
- Software
- Second hand deals

**PEANUT COMPUTER - THE LONGEST STANDING APPLE COMPATIBLE DEALER IN THE U.K.**  
**IBM ENQUIRIES WELCOME**

DATA SHEETS AVAILABLE ON MOST PRODUCTS

For more information:

Peanut Computer  
 Freepost  
 Dewsbury  
 WF13 1BR  
 (No stamp required)  
 Normal Delivery:  
 Low Mill, Dewsbury WF13 3LX  
 Telecom Gold 72: DTR 10199  
 Fax (0924) 498300

**PEANUT**  
**Computer**

Phone 0924 499366  
 (24 hour answering service)

Money back guarantee. Add 15% VAT to all prices. Carriage (for orders under £100) - £3.00 (for orders over £100) - £8.00. Monitors £8.00 - Printers £8.00. Prices may fluctuate with £ rate, goods will be charged at prices ruling at date of despatch.

We will match the price of any item elsewhere, provided documentary proof is given, and the item is ex-stock. Dealer enquiries welcome inc. IBM.

Peanut is the trading title of Golf Computers Ltd.



## Personal Newsletter


---

**Personal Newsletter from Softsync claims to bring the exciting world of DTP to the Apple // - Peter Stark sees how well it does the job.**

---

**Personal Newsletter is available from MGA Microsystems, Pear Tree, Appledore, Kent TN26 2AR. The price is £59.95 inclusive of P&P and VAT.**

---

 It can be both useful and interesting to have the ability to use a micro for producing short newsletters and the like, containing both text and graphics. Of course, this also offers you the chance to reveal that personal touch of artistic creativity which had previously remained unobserved by your friends. **Personal Newsletter** is a recent product of Softsync, Inc. which could well appeal to those of us who have an Apple IIc, IIGS, or IIe (with 128K and 80 column board).

### General description

Personal Newsletter was supplied to me as three non-protected 5.25" ProDOS disks: the Master, a Fonts/Samples, and a (double sided) Clip Art disk. These are supplemented by an excellent 192 page manual. Either one or two disk drives can be used. Relatively little disk swapping is involved, so one drive is quite sufficient in practice. For certain operations, a mouse is useful, but is by no means essential.

### Text layout and creation

A major feature of Personal Newsletter is that it enables you to create rectangular 'windows' which hold the text that is entered and eventually printed. The main page is treated as 'page 0', and up to nine further windows can be put in at any one time. Text can be placed in any window, and words wrap round at the line ends (i.e. the window borders) as with any reasonable word processor. Various text handling facilities are avail-

able, such as cut, copy, and paste. Each window can be moved around on the page very easily, and can be superimposed on other windows if you wish. Text can be either typed in or imported from ASCII text files created by other word processor programs such as AppleWorks. If the text is too long for the originally selected window, you can arrange for it to flow into other windows if you like. This makes it very easy, for example, to produce text in two or three columns.

### Styles

The style of chosen parts of the text can be varied to some extent (bold; underline; outline; italics; centred; or left- or right-justified, etc.), as can the spacings between lines and between characters. The claim in the manual that Personal Newsletter 'comes with many fonts on the Fonts/Samples disk' is something of an overstatement. There were, in fact, 6 fonts on this disk: a useful number, but not what most people would call 'many'.

An important point to be aware of is that all of the text on a page has to be of the same font and size (12 point). If you change the font at any stage, the whole of the text on the page is changed accordingly. This seemed something of a limitation.

Admittedly, it is usually not good practice to have lots of different fonts on a single page, but it would have been nice to have the chance to use at least a couple of different text fonts and/or sizes per page. If you want to have larger text, for headlines etc., you need to use and magnify text in graphics mode (as mentioned below).



## Graphics

To complement its text handling facilities, Personal Newsletter has a number of graphics options. One of these options allows you to draw, using a variety of brushes, patterns, and tools, and then to move the result onto the text page. As a second possibility, you can import standard or Double Hi-Res screen areas created by other programs. A third option enables the user to import graphics created using programs such as Print Shop or Dazzle Draw, or from the Clip Art disk which is supplied with Personal Newsletter. Further Clip Art disks in the same series are available from Softsync, Inc.

Graphics which are originally on DOS 3.3 disks must first be converted into ProDOS format. In all these cases, the imported graphics can be moved about the page without any difficulty, and can be edited quite simply. Relatively large graphics need to be edited in sections, as the graphics editing window is limited in size (just over one inch in depth).

The graphics facilities also include letters and numbers as 'text' - which is useful for headlines etc. The same six fonts are available in graphics mode as in the normal text mode, but more type styles are available in the graphics mode (nine, including: bold; reverse; outline; and shadow). 'Text' produced via this graphics mode consists, of course, of graphics images. It is not confined within text windows, and cannot be edited as simply as the ordinary text; instead, it has to be edited in the same way as other graphics. However, graphics-type text can be moved around on the page very easily, and its height can be increased in steps so as to produce reasonably large headlines.

However, the enlarged versions of letters and numbers are not very smooth in outline. With graphics-mode 'text', you can in fact arrange to have several different fonts on the same page (and even in the same

graphic), by successively loading different fonts from the files on disk. This can be a little laborious, but it does work, and can give interesting effects.

I found that with certain of the imported graphics, the image on the screen is not an accurate representation of the version that would be printed out on paper. In these cases, expansion to double height is needed in order to give acceptable printed results. This potential pitfall was not spelled out very clearly in the manual, although it is hinted at.

With Personal Newsletter, it is also important to be aware that the text does not automatically flow round the graphics. Careful planning is therefore needed to avoid unwanted overlapping of text and graphics. In general it might be best first to decide where to position your graphics, print out a draft with just the graphics, and then arrange the text windows to suit your needs.



## Documentation

The manual supplied with Personal Newsletter deserves mention - and favourably. Quite a lot of care has clearly been taken to make it simple for even the near beginner to learn how to use the program. The descriptions of how to do what are generally easy to follow, and

the reference section ('Definition by Commands') is helpful and clear. Another useful chapter, 'Hints And Tips', gives sensible advice on how to design and structure newsletters and other documents, and what sort of general style to aim for.

## Printing, and end results

Personal Newsletter can be used with quite a number of dot matrix printers. The appearance of the printed material obtained is generally attractive and quite acceptable for many purposes. The text fonts are pleasant to look at, and the Clip Art usually comes out satisfactorily.

Just occasionally, some other types of graphic (e.g. from a digitized picture) may look a little disappointing in the printed form, but this is probably the fault of the graphic itself rather than Personal Newsletter.

## Overall impressions

As someone who is very far from being an expert on computers, I enjoyed Personal Newsletter and found it pleasingly easy to pick up and use. The manual was refreshingly clear and helpful.

If you are mainly interested in having a reasonably priced and simple means of producing quite acceptable newsletters and the like, Personal Newsletter is well worth considering.

On the other hand, if it is important to you to be able to place several different fonts and sizes on the same page, or to have such facilities as automatic wrapping of text around graphics, or to be able to print out with a LaserWriter, then you may well prefer to think about other alternatives (probably more expensive!).

Either way, you might also think about Personal Newsletter as an uncomplicated but reasonably versatile aid to practising and building up your skills at desk top publishing.





## Timeout Series

---

**Timeout is a new set of 7 enhancements for AppleWorks. Audrey Friend has tried them out and reports on the first three.**

---



I am one of the Apple2000 members who 'took up the challenge' thrown out by Jim Panks and Jon Gurr in the December issue of our magazine. I asked if I might test three of the new Timeout applications from the point of view of the computer user rather than that of the computer 'buff'.

Timeout is the latest series of enhancement programs for AppleWorks, and of the range of seven applications I have tested three, namely DeskTools, QuickSpell and UltraMacros. I have tested them on my own Apple IIe, equipped with a Flipper Card, 3.5 disk, Timemaster Clock and Imagewriter, (set-up A); and on an Apple IIe equipped with a plusRAM 256K card, no clock card and two standard drives, (set-up B). With the former set-up AppleWorks, QuickSpell, UltraMacros and DeskTools were all loaded into memory and left a desktop of 927K, instead of the usual 1012K without Timeout.

### The Timeout Series

The Timeout series is published by Beagle Brothers, the package for each program comprises a 5.25 "floppy" disk and a 3.5 disk, neither of which is copy protected, and a user's manual. Unfortunately the box in which they are packed is rather over sized and it was somewhat alarming to hear the contents rattling around when they were delivered. One manual was in fact slightly damaged. Disks and manual are, of course, copy-righted. As is their custom, Beagle Bros. do remind purchasers to make the usual working copy, after write-protecting the master Disks.

Timeout is the controlling program. It is compatible with AppleWorks version 2.0 and later, but not with foreign language versions of AppleWorks. It is reported to be compatible with most enhancements to AppleWorks, including Super Mac-

roWorks, AutoWorks, Applied Engineering's desktop expander, Checkmate's desktop expander, and the Pinpoint accessories.

Timeout itself is a once and for all enhancement to the AppleWorks Startup disk, after which the applications required by the user can all be copied to the startup/program disk, if working with a 3.5 inch disk, or to a Timeout Applications disk if working with standard drives. Even better, for those users who have large memory systems, the startup disk can be configured so that all the applications are loaded into memory at boot-up. Standard drive users may have more than one applications disk, provided that they all have the same name, e.g. /Timeout, the multiple disks may be loaded sequentially into memory in a large memory system, or used directly from disk if memory is at a premium.

Explicit instructions are given in the manual to enable the user to install Timeout, and I experienced no problems in either the installation or getting the applications 'up and running' with set-up A (see above), but became extremely frustrated in trying to get it installed in set-up B. In fact I failed miserably to do so and the whole system 'crashed'. A telephone call to Cirtech solved the problem. The plusRAM modification to the startup disk is still required, but the modification which is made to the AppleWorks program disk should be omitted by plusRAM users who wish to use Timeout. Thereafter installation is perfectly straightforward.

All the applications work from within AppleWorks and it is very pleasant indeed not to be faced with learning complicated new commands. Access to all of the Timeout applications is by Open-Apple-Escape, and with one or two exceptions the return to the current file is achieved by pressing Escape. Once oa-esc has been pressed the Timeout



menu pops up, superimposed on the current screen, and the application required is selected either by number or by highlighting it and pressing return. Most of the commands and key combinations which are valid for AppleWorks have precisely the same functions in TimeOut applications. In general, the manuals are clear and easy to follow, but there are some instances where I feel that more information is warranted.

## QUICKSPELL

This is as one might expect a spelling checker. The first stage is to specify the location where TimeOut can find the dictionaries, a process which is simple and well documented in the manual. There are three dictionaries, an internal one, a main dictionary of some 80,000 words, and a custom one, initially of 1K, to which the user may add words at will, the ultimate size of which is limited only by the amount of space available on the disk. The user has a choice of checking the entire document (if more than 100K more than one pass will be required), or a screen or a single word. Queried words are displayed as 'unknown' words. The options available to deal with queries are to correct in context, (either a single word or all repetitions of that word), to replace the word, add it to the custom dictionary or ignore it. I ran a test document of 3658 words containing several technical terms and checked and corrected the entire file in 1min.35 secs. (48 words were listed as unknown).

A Quick memory list - can be enabled/ disabled. If it is enabled QuickSpell remembers every word it looks up in the main and custom dictionaries. The next time QuickSpell is used in the same session, the words in the memory quick reference list are not checked again in either dictionary. This can save a lot of time if several checks are made on the same or similar documents in one session. The quick reference list does however take up some room on the desktop, so if memory is at a premium it should be disabled.

Another option is Get suggestions.

This presents a list of possible spellings, usually the most likely ones at the beginning of the list. If the required word appears pressing space bar whilst the word is highlighted and then pressing Return, will result in the instant replacement of the word. If the suggested spellings list has not been interrupted as above, it will print all the likely (and some unlikely) spellings up to 29 at a time. If the word required hasn't appeared a further list can be called by selecting 'more' which appears at the end of the list.

It is difficult to spot double words with a visual search, but QuickSpell will find them very quickly. If any are found it will tell you at the top of the unknown word list how many double words there are, and when option 5 is selected from the menu they will be shown with the first word highlighted.

The custom dictionary is stored on disk as a standard ASCII file, this can be imported into an AppleWorks Word Processor file and edited. The manual gives full instructions for this process.

This is an excellent enhancement for AppleWorks Word Processor files. Of course the main dictionary gives American spellings but this is no real problem

tised on the DeskTools disk, and this probably sells more applications packages but I can't help feeling as a user that it's a bit "naughty" that some users may buy DeskTools when it appears from the "ads" that it is the only way to get Word Count.

## ULTRAMACROS

This is another truly excellent package. As a very lazy typist I have long been addicted to the use of macros and having progressed from MacroWorks to Super MacroWorks I thought I was content, until I tried UltraMacros.

Before using UltraMacros a further installation procedure is necessary, that of adding UltraMacros System to the startup disk, and thereby making available a default set of macros. The process is simple and the manual gives very clear guidance on the macros, and how to edit the default set for the user's own requirements. There are several files on the disk which are AppleWorks Word Processor files and these should be loaded, printed if you have a printer and read carefully, since they contain useful examples and explanations which are not in the manual. Otherwise some surprises may occur. There is also an apparent option to install a Pathfinder

System instead of the format a disk option in the AppleWorks other activities menu. This is actually nothing but a menu of options available through another software package costing several dollars. Another good reason for reading the awp files on the disk, because one of them describes this option as a demo.

Space does not permit a really full description of the package, but there are some very useful macros, like

Solid-Apple-Delete which will remove the character under the cursor and move up the characters from the right to fill the gap. There is another for sequentially numbering a series of spreadsheet cells, yet another copies labels or values from one spreadsheet cell to another. Spreadsheet columns can be shrunk or expanded, or sorted alphabetically or numerically, or telephone call details entered automatically in a file, to give just a few examples.

File: Timeout review REVIEW/ADD/CHANGE Escaper: Main Menu

-----Chars per inch: 17 chars

-----Platen width: 8.5 inches

-----Left margin: 1.5 inches

-----Bottom margin:

-----Centred

-----Double Space

-----Page Header

-----Unjustified

I am one of the App thrown out by Jim Pank's zine. I asked if I might from the point of view computer 'buff'.

Timeout is the late Works, and of the range of seven applications I have tested three, namely DeskTools, QuickSpell and UltraMacros. I have tested them on my own Apple IIe, equipped with a Flipper Card, 3.5 disk, Timeaster Clock

Type number, or use arrows, then press Return

Timeout Menu

1. Calculator	9. Macro Compiler
2. Case Converter	10. Macro Options
3. Clock	11. Note Pad
4. Data Converter	12. Page Preview
5. Dialer	13. Puzzle
6. Diary	14. QuickSpell
7. Envelope Address	15. Utilities
8. File Encrypter	16. Word Count

## Timeout Main Menu

once the English versions have been entered in the Custom dictionary. The manual gives clear instructions with regard to installation, configuration and the actual use of QuickSpell, but it's so easy to use that you will probably find the manual redundant after your first session. I have one small criticism: there is word count on the QuickSpell disk, it's a logical place for it to be, but the advertisements for TimeOut do not say that it is there. It is adver-



The user can record macros for use in the current application with the open-apple-X command, and they can be saved and used again. The current macro set can be loaded into a blank Word Processor file edited, re-compiled and used all without leaving AppleWorks. The current macros can also be saved as a new default file. There is a macro for automatic start-up, which I modified for my own use and it now also adds 3 files to the desk top which need to be there each session. Another which I have written will open a data-base file, give it a name, enter the names of fifteen categories, go to multiple record and enter 99 blank records. Not bad with one key-stroke.

Another great advantage which UltraMacros has over its predecessors is that one is not confined only to solid-apple-(key) combinations for macro functions. Keys normally reserved for open-apple, and those solid-apple reserved macro keys can all be used with both-apples-(key). There are open-apple macros to enter the date, the time, change case. Local macros for use in any one of the AppleWorks applications can be written, as well as global macros to use in them all. In fact a single key e.g. 'D' could conceivably have eight different macro definitions. This gives enormous potential. It is also possible with this package for the programmers to write macros containing calls, if-then-else, peeks, pokes, strings and numerous other such terms which leave we non-programmers gasping for air, but on the other hand it's not necessary to be a programmer to use UltraMacros efficiently. One can also have macros, which may be left sleeping or rudely awakened when required.

There are various 'options' also available on this disk, ranging from setting the 'blink rate' of the cursor, to switching the screen off automatically in the absence of a key press for a pre-determined length of time, or saving the current macros as a default set to activating a 'key-lock' for disabled users. (There are several others).

Once more a super package, useful and

user friendly. Again an unadvertised 'bonus'? - the Data Converter.

## DESKTOOLS

There are thirteen applications in this package, viz. Calculator, Calendar, Case Converter, Clock, Data Converter, Dialer, Envelope Addresser, File Encrypter, Note Pad, Page Preview, Puzzle, Word Count, Utilities.

Selecting Calculator brings to the screen a 'calculator' on the right half of the screen and a 'tape' on the left hand side upon which calculator results may be 'printed'. In addition to the usual 0-9 digit keys, and 4 basic math functions, it offers +/-, square root, and memory keys. There is one memory, with In, Add, subtract and recall keys. Clear entry, equals and clear all keys complete the customary keyboard. The maximum number of digits which may be displayed is 20, and the

ties to the listed tasks, and mark the status of those tasks e.g. completed or carried forward. Escape goes to the previous level of activity, several escapes to go from task mode to current file. It works, it's good, and well documented in the manual.

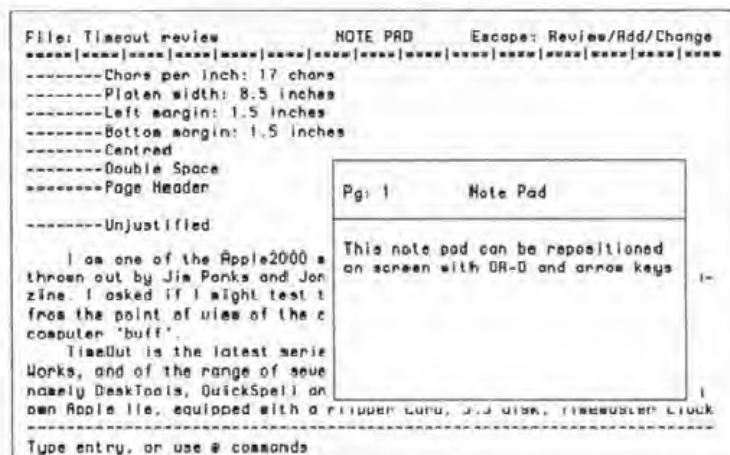
**Case Converter.** I really don't know what use this will be to anybody. It will convert from upper case to lower case or vice versa. It will capitalise a sentence, or a word. But, it only works on the entire document. If one really wants every word capitalised or every letter in the same case then this works fine. Otherwise I can't help feeling that it's a bit of a 'stocking filler'.

**Clock.** If you have a clock, this will clear your current screen and show you the time and date; if you haven't a clock it will show you the date you initialised at boot-up, and a time of 0:00. If you have a clock you probably don't need this application, and if you haven't it's of no use anyway.

**Data Converter.** I thought 'good this will save a lot of time on transfers from Data Base to Spread Sheet' - something which I do frequently. It worked fine on the small samples given on the TimeOut disks, but when I tried it on some data extracted from my own files it was a disaster. The data used was some 150 records (well below the maximum capacity of the Clipboard), there were 3

text categories, and 5 numerical categories. All the text categories transferred perfectly, three numerical categories appeared on the spread sheet as all zeros, and some of the entries in the remaining 2 numerical categories had zeros substituted for the original data. This represents a 60% plus loss of data and is totally unacceptable. This was version 1.1, and I have referred it back to MGA who have promised to contact Beagle Brothers. Perhaps there is an update. Certainly I would not trust this version in my type of work. The manual devotes only half a page to this topic, and gives no indication that certain types of data may not transfer properly.

**Dialer.** I cannot comment on this one, because I do not have a modem. I could



TimeOut Notepad

sequence of operations follows standard algebraic logic. Calculations may be printed to the tape, which may be edited, but a very good aspect is that the result of a calculation may be entered directly into an AppleWorks file (WP.DB or SS.) by pressing E(nt). You cannot get back to the current file from calculator by pressing escape, only 'O' for off will do that. Simple to use, clear explanation in the manual, very good.

**Calendar,** valid from 1910 to 1999, is a very handy little 'pop-up'. If you have a lot of appointments or you like to make daily lists of the tasks you have to undertake, there are facilities here for you to enter them, have the appointments chronologically ordered, allocate priori-



give a quote from the manual on what it is supposed to do, but feel that it is probably better to leave it for some one to report on in the light of experience.

**Envelope Addresser.** Again, I wonder why it's included. Perhaps in the States more printers take kindly to envelopes than do most of ours. It works by presenting a facsimile envelope on screen to which the address can be transferred from the document currently on screen. Once transferred the address may be repositioned on the envelope, and there is a facility for typing in extra lines, e.g. 'For the Attention of ...'. I looked at it on screen, but the Imagewriter doesn't like envelopes so I have not actually tried to print an envelope with it. I have to say that I feel a facility for addressing labels one, two or three across would have been infinitely more useful. There's not much point in having mail merge, or window envelopes and messing about trying to print individual envelopes.

**File Encrypter** has been included to protect confidential work. It works on the password system. When encrypt is selected the user is asked to enter an 'encryption code' which may comprise any combination of characters. As each is typed in an asterisk appears on screen. When return is pressed the code is requested as a verification procedure. When this is done if the two entries agree the entire document is encoded, and appears as gibberish on the screen. Decryption is exactly the same procedure. Provided the codes are entered in exactly the same format each time it works fine. If lower case is entered at the decryption stage and upper case has been used at the encryption stage, which I did deliberately to see what happened, then the file is 'clobbered' which is what one might expect. It's simple to use, and well documented.

**Note Pad**, as its name implies is a little note pad which pops up on screen when called, very useful for making the odd notes when an idea comes into your head right in the middle of working on a totally different file. It offers 10 lines of 40 characters, and 32 pages. It can be edited or saved to disk, and retrieved from disk at a later time. Users unfamiliar with the use of pathnames may have a little difficulty with this one, but once the pathname principle is followed there should be no problems. It

works, it's well documented and potentially useful.

**Page Preview** gives a graphic representation of the AppleWorks Word Processor document using dots for each character. I tried this with great anticipation, and it seemed fine. The manual asks one to try this out with a large file, so I did. I used a file of some 4,000 words and gleefully previewed it, and having 'escaped' from preview, pressed `oa-p` to print to the Imagewriter. I was astounded to get half a page of double spaced text and then a form feed to the next page, where I again got half a page of text etc. Granted the parameters were set for double spacing, so I expected that, but I did not expect half a blank page. I then spent some considerable time investigating this problem and found that at the AppleWorks default W.P. setting the correlation between the preview and the hard copy was reasonably good. However as the parameters were changed with regard to margins, characters per inch, spacing etc the correlation between the two decreased pro rata. With 17 cpi, 1.5" left margin, 1" top and right margins and 1.5" bottom margin there was a difference of some 6 pages between the number of pages on preview, and those actually printed using `oa-k` to determine page breaks instead of printing directly after preview page formatting. Another discovery was that if page breaks calculated with `oa-K` are present in the document, it is impossible to get preview mode. Although the TimeOut menu is called and preview selected it simply returns to the current screen. Once the page breaks are cancelled by deleting one of them, preview can be called again. Likewise if preview is used first, `oa-k` page breaks cannot be calculated unless existing page breaks are cancelled.

The annoying thing about this is that the manual devotes only one page to the absolute basics of using this application and gives no suggestion that such difficulties might arise. If preview has been designed to work only with standard settings then surely this should be made plain in the documentation. As a non-programmer I do not know if it is possible to make this thing work equally as well with non-standard settings, but I do know that if the presence of this application had been instrumental in causing me to buy this pack-

age I should feel that I had been 'caught'.

**Puzzle** - sorry, but I feel that this is just another 'filler'. It's the old fifteen tiles on a sixteen square matrix, which are scrambled when the game starts, and the aim is to get them back into the original arrangement with the aid of the arrow keys and return. Yes it works, but perhaps it should be on a games disk, rather than a 'work oriented disk'.

**Word Count** - excellent, very fast, very easy. Counts the number of words, number of characters, average word length and tells the user the current line. I wish it also gave the number of unique words as does another well known document checker. As previously stated this is also on the QuickSpell disk.

### Finally the Utilities.

This is one application which of necessity appears on every applications disk. It is menu driven, and enables the user to configure various aspects of the 'system' which has been set up. Such matters as the locations where TimeOut may find the various applications when they are called, a facility for dumping to and from memory, for changing the memory status of applications, e.g. from memory to disk based and vice versa. Changing the name of an application or sorting the menu are all dealt with through this facility.

In conclusion, it must be said that TimeOut offers a great deal to the AppleWorks user. In general it is possible to add a great deal of power, and supply some of those facilities which have been sadly lacking. It is a great plus that they work within AppleWorks, and an additional benefit is that the `oa-H` command can be used to print screens, a facility not available in some other enhancements to AppleWorks. I unreservedly recommend QuickSpell and UltraMacros. It is probably inevitable that however objective one tries to be in looking at software the subjective element creeps in, and from my own viewpoint DeskTools was very disappointing, and I cannot recommend it in its present form. I also believe that it would be beneficial to the potential user to be informed of all the applications available in each package so that before buying they may know precisely which packages are required for their own specific needs.



# Apple //

## WIZARDRY IV

Reviewed by Len Cavanagh

### The Return Of Werdna

Really I was trying to get hold of a copy of Ultima V, when the friendly chaps at Strategic Plus convinced me that it still didn't exist. So, I was persuaded to purchase Wizardry IV, my first foray into this series of Adventure/Role Playing Games. On opening the package you find three double sided disks.

This is a large adventure. Although side F is only an advertisement. We then come to the players handbook. Half of this booklet is headed 'The Prequel', which gives you a rundown on how you happened to be sleeping ten levels down in a dungeon. The second half of the booklet explains how to make copies of the master disks and how to save your game. You also get a spells reference card in the package and that's about it. There is no description of commands that the game will understand, but you do get dire warnings that if you haven't played a Wizardry game before, then you have no chance. This game has a bit of a twist on the normal theme. You as Werdna are not the good guy, and whilst you are sleeping, in bursts a gang of do-gooder adventurers. On waking you are naked and defenceless and this is where your adventure begins. Having read everything in the box and realizing how limited my chances were (having never played Wizardry 1 2 or 3), I set off. Most of the keyboard commands required are fairly intuitive, so that on awakening I managed to gather a party of monsters and fight everything in sight. The screen shows you in a three dimensional maze, while any information required is displayed in windows. It is very important to map your progress in this game (graph paper is provided). Each level on Wizardry IV has a different type of maze and layout. On reaching a higher level you gain hit points and can collect more powerful monsters to assist you. On each level there is only a finite number of opponents and once they are all killed, you are at liberty to explore that level in safety. But, if you should Save your game, then all your opponents are rejuvenated, and ready to do battle once more.

On each level there are special locations where objects are to be found, which are necessary later in the game. The only real problem with this game is the method utilized for copy protection. SIR-TECH provide you with a twenty one page booklet with hundreds and hundreds of codes in it. Every time you reach a new level, you are asked to decode a twelve figure code from the booklet. This wouldn't be too bad, but the booklet is coloured dark red and the codes are written in black, which achieves it's aim at being impossible to photocopy, also it's almost impossible to read and soon becomes quite annoying. My conclusions are, that it is a cracking game, just as addictive as the Ultima series and if anyone out there can help me to get further than level four, I would be delighted.

Title	Wizardry IV
Authors	A Greenberg & R Woodhead
Publisher	SIR-TECH
Requires	Any Apple II series



## COMTEC COMPUTER REPAIRS

- FAST TURNAROUND - NORMALLY 2 DAYS
- 3 MONTH WARRANTY
- COMPETITIVE PRICES ON ALL SERVICES

### EXAMPLES

APPLE II + OR //e Power Supply. £32  
APPLE II + OR //e Motherboard. £32  
Apple Interface Card (most makes). £25  
Disk Drive - cleaned & aligned. £25

Please ring for other repair prices or  
send equipment for free estimate.

Quantity Discounts available.

Repair prices include P&P and V.A.T.

### MACINTOSH UPGRADES

128K to 512K - 128K/512K to MacPlus

MacPlus Extra Memory

1MEG TO 2 MEG

1 MEG TO 4 MEG

RING FOR BEST PRICE

### NOW IN STOCK

MacPlus Connectors, Serial & AppleTalk.

Price depends on quantity.

### COMTEC

ST GEORGES MILL,

3 ST GEORGES STREET,

MACCLESFIELD, CHESHIRE. SK11 6TG

TEL (0625) 34691

### Beagle Bros TimeOut series integrated AppleWorks applications

7 NEW AppleWorks enhancements that are more advanced, more powerful, faster and easier to use than anything you've ever seen

#### TIMEOUT GRAPH £89.95

Turn spreadsheets into great looking graphs inside AppleWorks!

#### TIMEOUT SUPERFONTS £79.95

Print with great looking Macintosh fonts from inside AppleWorks!

#### TIMEOUT QUICKSPELL £69.95

Check spelling from inside AppleWorks. Fast!

#### TIMEOUT ULTRAMACROS £59.95

The most powerful macro program ever written for AppleWorks!

#### TIMEOUT SIDESPREAD £49.95

Print spreadsheets sideways from inside AppleWorks!

#### TIMEOUT FILEMASTER £49.95

Total control over files and disks from inside AppleWorks!

#### TIMEOUT DESKTOOLS £49.95

The best desk accessories inside AppleWorks!

- TimeOut series requires AppleWorks 2.0
- TimeOut is compatible with most enhancements to AppleWorks

All prices include VAT and P&P.

Payment is accepted by ACCESS, VISA, or Cheque

### DIAMOND SOFTWARE

Dept A2000, Clayton Holt End, Underhill Lane, Clayton,  
Hassocks. West Sussex BN6 9PL

Telephone Hassocks (07918) 2531 (24 hours)

Telex: 934999 TXLINK G Quoting MBX 079182531



# Apple //

## STARGLIDER

A test-flight by Neil Hartley

Starglider is one of the greatest games out, which combines space style combat with the best low altitude flight simulator ever, and having played it many times, I can honestly say that I have enjoyed every game.

Without having read the manual you can only marvel at the graphics, shoot everything in sight and hope you don't run out of energy before you've gained more points than last time.

But once you have read the manual the game opens in front of you and you are able to incorporate much more skill in your flying.

The graphics belonging to this game are incredible and come in two parts. The first, the view in the centre of the screen, is a line graphic display of your surroundings, in full colour. This display is not noticeably slowed by laser fire or large numbers of ships and the display flows well throughout the game. With a single press of a key you enable a well designed missile launch system which incorporates a 'missile's eye view' with slight directional control and a not too generous time limit.

The second part is the constant surrounding display of status and radar map. This is invaluable for staying alive and keeping track of the refuelling and repair requirements. The surrounding border also contains the score, compass heading, map co-ordinates, scanner, altitude, speed and others facilities, all colour coded for easy status reference (all this is still legible in monochrome).

An added bonus is the extremely good sound that is effectively combined with the graphics.

As is usual, you only get two missiles and need three to destroy your game target. This of course means you need to dock with the annoying rotating silos that rotate just to make docking difficult and potentially deadly if you have low energy level, which is why you usually want to dock!

Within the silo, apart from getting repaired, you can have great enjoyment by interrogating the computer and learning all you didn't want to know about the enemies power, most of which you probably guessed when you were undoubtedly attacked whilst docking.

And lastly...the first thing to learn is that most things you encounter will try to kill you, and killing them will probably consume your limited supply of missiles or drain your laser energy banks to necessitate immediate docking to refuel!

Title **Starglider**  
Publisher **RAINBIRD Software**  
Requires **Any AppleII**



Get more out of  
**Print Shop™** and **AppleWorks™**  
with these great values.

### Labels, Labels, Labels

Use Print Shop™ graphics, borders and fonts to create any size label, badge or postcard. Merge fancy labels with your AppleWorks database. Print in color on color printers. Use new GS multi-color graphics. Retail price £39.95 for product PS03.

### P.L.U.S.

Do you love Print Shop™? We do! That's why we've created P.L.U.S., a set of ten "Print Shop™" related utility programs that are so useful, you'll wonder how you ever got along without them. Retail price is £24.95 for product PS01.

## MGA MICROSYSTEMS

PRICES INCLUDE p&p/VAT

TEL: 0233-83-571



PEAR TREE  
APPLEDORE, KENT  
TN26 2AR ENGLAND

PRINT  
COLOR  
LABELS

## CHAMELEON SOFTWARE

Call in the cheap rate until,  
9.00pm on Saturdays.  
Cheque or P.O. accepted.

**CUCKOO LANE,  
PINCHBECK, SPALDING,  
Lincs. PE11 3XT  
Tel: 0775 85481**


Listing paper from £10 for 2000sh!

BASF 'Extra' Discs:	£	PRINTERS:	£
5.25" S/S D/D Per 10	10.00	Citizen 120D 80 col 120cps	
5.25" D/S D/D Per 10	12.00	Including interface	139.00
5.25" High Density /10	17.00	Citizen LSP 10-P 80 col	
3.5" S/S D/D Per 10	13.00	120cps	249.00
3.5" D/S D/D Per 10	17.00	Citizen MSP 10E 80 col	
		160cps Draft 40 NLQ	259.00
		Epson LX800 150cps	229.00
		Epson FX800	339.00
		Epson FX1000	439.00

DISC BOXES:	£	SOFTWARE:	£
40 3.5" DISCS	8.95	Archon I: The Light & The Dark	15.00
70 5.25 DISCS	11.00	Archon II: ADEPT (Battle of Mages)	17.00
		Autoworks 2.0 Macros etc (GS/e/c)	39.00
		Bard's Tale: Tales of the Unknown	16.00
		Bard's Tale II: The Destiny Knight	42.00
		Dazzledraw dble hi-res gphcs (e/c)	59.00
		Fontrix 1.5	65.00
		Fontworks (for Appleworks-GS/e/c)	39.00
		Gemstone Warrior	26.95
		Hobbit	27.95
		Kings Quest I, II or III	39.95
		Labyrinth: the computer game	31.95
		Newsroom	31.00
		ProBasic with Program Writer	39.00
		Shape Mechanic	31.00
		Ultima I	35.95
		Ultima II	39.95

CARDS:	£	***Second user dept.***	
Ramfactor 1Mb	269.00	Complete IIe system inc 2dd	
Ramworks 1Mb (Ile)	269.00	& mon. only	£350 !!!
Cirtech Champion	39.00	512k Mac, 400k int dr	
GS-RAM 256k	149.00	only	£690 !!!
GS-RAM 512k	169.00	3 months guarantee.	

## TimeOut series

 Following Jon Gurr's offer in Apple 2000 magazine, MGA Microsystems sent me some of Beagles' TimeOut series: SuperGraph, SuperFonts, SideSpread and FileMaster. Some are fine, and some really remarkable. There were problems with FileMaster which vanished when MGA sent version V1.2 of TimeOut and version V1.1 of FileMaster.

Overall these 'Pop Up' packages integrate nicely together, largely retaining the AppleWorks User Interface and give a glimpse of the possibility that we have not seen anything yet when it comes to what the Apple II can do.

### HOW DOES IT COME AND WHAT DO YOU NEED

Each separate pack comes with 5.25" and 3.5" discs operating under ProDos 1.4, patched with 'Bird's Better Bye', a fairly slim American Quarto 'designer' manual and the usual card recommending OPEN APPLE. Sadly absent are the Victorian engravings, with Beagle Brothers brand of Monty Python humour. Must be serious commercial stuff this!

You need an Apple IIe, IIc, or GS and at least 128K memory, plus AppleWorks2.0

### PRELUDE

There have been a number of interrupt driven software enhancements for AppleWorks in the last few years. Some have been very useful. Personally I have used Pinpoint since 1985, and would be lost without a spelling checker, a communications package, a note pad and a macro facility.

So what's new about TIME OUT? On the whole the program has tried to keep the AppleWorks user interface in place, you are hardly aware that everything has stopped, and you are no longer in AppleWorks. You can use the clipboard to con-

vert spreadsheet data to data base and vice versa. It now gives AppleWorks graphing facilities comparable with SuperCalc 3a or Lotus 123. Full high resolution Graphics text output to printers (with WYSIWYG review) that can combine a range of fonts and pictures and graphs, and the means of printing a sideways spreadsheet (the print quality is always stunning). TimeOut has one time installation and front end modification for printers, interfaces and RAM usage which work with ease and grace, and a fairly user friendly filer.

### MY CONFIGURATION AND HOW I SET ABOUT IT


APPLE II c with UNIDISC 3.5, Epson FX80 with serial to parallel interface.

APPLE II e with DUODISK, UNIDISC 3.5, 1 meg PlusRAM, ImageWriter I with SuperSerial card.

I decided to do all the initial work on the Apple IIc on the basis that I should work with 'patchless' AppleWorks first and that this would show up any memory limitations. I used Prosel as the initial program selector, and just to make life a whole lot easier put everything on single 3.5" UniDisk. It took me about 2 hours to have the whole package up and running, and that is a tribute to TimeOut rather than to me.

A few days later, after I decided that everything was 'Up and Running', and I patched another virgin version of AppleWorks with the PlusRAM 'minimum patch', re-installed TimeOut, and I had a package that would work equally well on either machine.

Finally I have a version of AppleWorks which can be copied to /RAM7 as a RAM image with Pinpoint and TimeOut Accessories both in place and working in harmony.

(Please note well that there is no Pinpoint compatibility when UltraMacros is added from )

---

**'Open-Apple &  
escape to TimeOut'  
says Peter Davis.**

---

**Our second article on  
Beagle Bros' TimeOut  
Series.**

---



TimeOut. This was a rather late discovery for me, and does not negate the points I have made about the products tested here. Someone wishing to continue with Pinpoint and contemplating the purchase TimeOut UltraMacros should bear this in mind.)

## CONTRASTS

If you look at the range of 'POP UP' accessories offered by Pinpoint and TimeOut, you cannot help noticing a certain resemblance, in fact you might think it a little bit 'Me Too' with extras. Well the TimeOut accessories are more than just that, and I think it worth discussing some of the contrasting approaches used to achieve the same objective.

Pinpoint was released late in 1985. As one of the first interrupt driven pieces of software for AppleWorks, it may have been pretty shaky at first, certainly not now and Pinpoint's comprehensive range of accessories are something I use all the time. Beagle Bros whose SuperMacroWorks is pretty good, have the advantage of doing something with the benefit of that experience, plus 80/80 hindsight which is good. The range of packages they now offer more than brackets anything Pinpoint can do in AppleWorks and just in case they rightly claim to have made TimeOut Pinpoint compatible. While installing Pinpoint involves a number of steps and not a little planning, including the selection of printers, TimeOut requires just one step to install, the same goes for adding applications. With TimeOut changing printers, configuring interfaces, locating fonts and loading to /Ram are all handled from within AppleWorks with the aid of the UTILITIES accessory so that changes are so easy that Appleworks enhanced with TimeOut becomes an easily transportable package. For these reasons alone TimeOut would be preferred by any first time user.

I have tested TimeOut with Pinpoint and compatibility is perfect, even with Pinpoint Accessories that coexist with Appleworks like the Spelling Checker. The problem is you have to install Pinpoint last. After that TimeOut cannot be re-installed, and you no longer have a transportable form of Appleworks.

TimeOut is enabled with <Open Apple-Escape> to bring it up, and I do not

doubt equally compatible with Autoworks, SuperMacroWorks which are enabled by <Open Apple-P>.

Enabling Pinpoint causes AppleWorks 'to drop its drawers' and save substantial part of the program memory to be saved in form of a W.TEMP file to any available disk or RAM space. This takes

time but leaves the size of the AppleWorks Desktop unaffected. TimeOut takes up part of the Desktop, you have 55K not 56K on an Apple IIC. Once you get to an application this swallows more Desktop. The Utility Options which enable you to load specific Applications to /RAM for faster operation on a 128K Apple IIC can also cut your desktop to 12K. Similarly there is a definite limit to the number of fonts that can be incorporated in one document. Since many people have extended memory cards this may seem a small price to pay.

Pinpoint disables [OA-H], whereas TimeOut permits a screen dump under all just about all conditions and as far as possible retains the AppleWorks User Interface.

Pinpoint can be installed on BASIC.SYSTEM, Applewriter, RunRun, Prosel, and a host of other programs. TimeOut is limited to AppleWorks.

## OTHER TIME OUT FEATURES

The manuals are adequate, each having as section devoted to installation, tutorial and reference, some have extensive appendices. To supplement this each installation disk contains update information on an AWP file. (As a minor bonus there is a nice Binary file for printing AWP files to screen or printer which responds to 'Any key' at page breaks.)

Installation is carried out using a Startup file from Basic.System. If you were installing for the first time or adding a new accessory on a 3.5" disc the procedure would be as follows:-

Copy the Prodos from TimeOut to your application disc if you have not done

so already, there are several file duplications on each installation disk, so carefully check that you use the most up to date files. This is most important if you want get the benefit of the latest upgrades. You also need to copy all your AppleWorks files to the disk for easy access. For my applications the files I needed to have were:-

List of files						
Subdirectory: /PROSEL/TIMO has 46 K available						
Name	Type	Lock	BU	Size	Date	Time
TIMEOUT	Bin	Mo	+	4k	12/14/87	10.00 pm
TO.UTILITIES	Bin	Mo	+	6k	12/01/87	10.29 am
TO.SUPERFONTS	Bin	Mo	+	18k	9/23/87	00.00 am
TO.FILEMASTER	Bin	Mo	+	20k	12/01/87	12.25 pm
TO.SIDESPREAD	Bin	Mo	+	70k	9/11/87	10.00 pm
TO.CLIPBOARD	Bin	Mo	+	3k	10/16/87	9.52 am
TO.GRAPH	Bin	Mo	+	68k	5/10/87	11.08 pm

I have chosen my example using the FileMaster installation disk, but it could be any other TimeOut installation disk. Boot the FileMaster disc.

- You will then get the first screen V1.2 : choose update Appleworks
- Do you want TimeOut Applications sorted Y/N : does not matter
- Do you need more than one applications disc Y/N : does not matter, unless you had to have Applications on 5 1/4" discs.
- Select the location of TimeOut application: I chose option 3. A ProDOS Directory'; [Return] ;Enter [/prosel/timo]; [Return]
- Select current APPLEWORKS STARTUP location application: I chose option 2 A ProDOS Directory'; [Return] ;Enter [/prosel/apw]; [Return] ;
- Press any ; [Return] ; You should then see=> patching ALPWORKS System => replacing TIME OUT
- Press any key to start AppleWorks: and you are away.

Beagle Bros have really worked on printer interfacing where the variety on options and interface combinations is more extensive than anything I have yet seen. Compared to the Imagewriter, I have always regarded my serial to parallel driven EpsonFX-80 as the 'weak sister' when comes to graphics printing. This is no longer the case now with TimeOut's help.

TimeOut claims to patch AppleWorks so CONTROL-RESET jumps to main menu and not the monitor. This only works properly on an intermittent basis. You get back to AppleWorks main menu nearly every time but mostly files on the Appleworks Desktop are blank. An attempt to re-load files from disc returns you to the monitor or worse.

Each Accessory has to be separately configured through UTILITIES, (why not all?). Perhaps because there is significant inconsistency between the way UTILITIES is used re-configure printer and other features of each accessory. Unfortunately the location of TimeOut itself cannot be re-specified in this way. There is also another rather strange feature, if you try to re-configure an application like SuperGraph without a spreadsheet on the Desktop, you get a message telling you that you can't.

Warning! ProDos 1.3 is bad, 1.4 is good. Probably 1.1.1 thru 1.2 are OK but not tested. Somehow during the early stages of testing I loaded Superfonts under ProDos 1.3, and all of a sudden the program would not handle the 17k SuperGraph images anymore. The moral is use the ProDos you get I suppose.

There is a certain amount of overlap on what you get with each package. Some of these things come as a pleasant surprise, but they are not reflected in the advertising and might make you get something you do not want. As an example you might think that you only get the clipboard Data Converter with DeskTools, but it also appears in a number of the TimeOut packages including Sidespread and Supergraph.

DATA CONVERTER converts spreadsheet data to data base and vice versa. It gave a certain amount of un-reproducible trouble with TimeOut version 1.0. I have also heard that it has given trouble elsewhere, thus far I have not been able to make it go wrong with TimeOut version 1.2. (See SideSpread)

## FILEMASTER

Like the Prodigal son I have grown to cherish this part of the TimeOut package, because when it first arrived in its version V1.0 form, it was unsafe, had a battalion of bugs and strange idiosyncrasies. Now that Filemaster version V1.1 has come my way, I have to say it is functionally reliable

and performs just about any task you would expect of a ProDOS file program. It still retains an 'Un-AppleWorks-like' user interface and does not quite behave like the rest of TimeOut. (An example of this is OPEN APPLE-Q takes you to its own main menu then it makes you go through option 4 QUIT TO APPLEWORKS, all the other accessories do just what AppleWorks does.) You have the feeling that it was written by someone who was a little unfamiliar with AppleWorks and had not been exposed to the more beautiful aspects of SuperMacroWorks. The difference between V1.0 and V1.1 was startling. The first version had seven major faults that no longer exist in the second version and at that rate, by the time you read this many niggles you read here may no longer apply.

Having invoked FileMaster with OPEN-APPLEESCAPE you have a menu offering-

- 1 File Activities
- 2 Disk Activities
- 3 Version
- 4 Quit to AppleWorks

The 'File Activities' Menu has 9 options all of which all but one work perfectly. These options are:-

1. List files
2. Copy files
3. Compare files
4. Rename files
5. Delete files
6. Lock files
7. Unlock files
8. Change file type
9. Clear Backup Bit

I do not intend to cover each item in turn but let's take 'Option 1. List files' to give a flavour of how things work;

'List files' lists all the files you have in your current Appleworks directory. To change the directory you press OPEN-APPLE-RETURN and immediately jump to a new Menu which displays alternative drives or directories and gives you the option of changing by Slot and Drive Number or Prodos directory. It also gives you the chance to '2.AddaSubdirectory' or '3.DropaSubdirectory'. These terms need explanation. 'Add' allows you to add an available directory to the current path. Existing directories are displayed and may

be selected by highlighting the desired path. 'Drop' a subdirectory, backs up the directory one level. There are also some special commands OPEN-APPLE-V which allows you to 'View' all the files at once in the directory in compressed form, rather than be constrained by the usual AppleWorks file window. Likewise you can Arrange files in the directory, use selection Rules, Swap, Move and Insert files in new positions.

There are a couple of other features of 'File Activities' that need some comment.

'Change file type' gives you the option to change a file's format, the principal object seems to be as an aid for communications. There 15 obvious options and 255 other Prodos Options covering BAS TXT AWP ASP ADB DIR BIN FNT VAR REL PPF REL SYS. It all seems wonderful on the face of it, but personally I was only successful in 'Changing' the following:- AWP to FORMATTED TXT and again FORMATTED TXT back to AWP (all the initialisation shows). UNFORMATTED text to AWP does not work at all. Typical example could be DOCUMENT.LOG from Pinpoints Spelling Checker. To load that you need to go through Appleworks Word Processor and 'load text (ASCII) file', just as you always can with many other file types.

'Clear Backup Bit' shows + sign when a file has been backed up by FileMaster. This is a neat idea.

The 'Disk Activities' Menu only has 8 options all of which work perfectly. These options are:-

1. List disks
2. Copy disks
3. Compare disks
4. Rename directory
5. Erase a disk
6. Format a disk
7. Create subdirectory
8. Copy a subdirectory

Most of the items in this menu are self evident, some items need a little comment. 'Copy a disk' has one of the nicer features, letting you copy smaller volume to larger volume. 'Erase a disk' is extremely fast. 'Format a disk' is good because you don't get the DATA DISK flag that you get with the AppleWorks internal Formatter. 'Rename a directory' means, Rename a 'Volume' if you are



in the root directory. 'Copy a subdirectory' means create a subdirectory and copy all the files inside, you can use arrow keys to tick more than one subdirectory, but sadly only one will be handled at a time. You have to start again to do the rest. When you're copying or comparing disks or files, confirmatory screen appears ('No' 'Yes') to let you verify that the source and destination are correct. With 'No' highlighted, press OPEN-APPLE-RETURN to swap the source and destination.

Let me just mention a few things which make this accessory less than perfect. To copy files from a directory to another directory, you have to identify the disk drives first. Only then can you start entering full directory names. You can toggle set whole set of subdirectories for copying directory and contents, but you can only do one at a time.

My conclusion about the FileMaster part of TimeOut is that it is too invaluable not to have, but it could have been done a little better. It contains aspects which are slow, complicated and fussy. It still does not stand up well compared with the best and most elegant TimeOut accessories which really give AppleWorks a new lease of life.

## SUPERFONTS

This application provides the means of converting AppleWorks word processor text on the desktop to a double high resolution image which can combine Pictures, Graphs with over 47 fonts as one document. Documents can quickly be reviewed by printing to the screen, so that ultimately you have a WYSIWYG facility, prior to printing on a dot matrix printer.

Printing out is direct from AppleWorks and the quality both on an Imagewriter I & Epson FX80 are both remarkable. (Until now I have never managed to get consistent easy results with the Epson FX-80 and Orange serial to parallel interface. I hardly had to think with this program.)

To print a document you indicate which fonts or images are required at the beginning of the document so that a document might start like this:-

```
<1=chicago.12>
<2=geneva.18>
<3=los.angeles.12>
```

```
<4=monaco.12>
<5=new.york.24>
<p1=Reg.Graph>
```

Angled braces <2> indicate commands which are ignored by the printed text, thus the first commands at the head of this document indicate that fonts 1 thru 5 should be loaded to memory followed by <p1> which in this case is a graph image. Individual fonts are then specified by number <4> at an appropriate point in the text. You can mix the order and even change font in the middle of a line. The PIC must stand clear on its own, thus:-

```
<p1>
```

Most of the normal AppleWorks [O-A-O] print options are available. The most notable lacks are [PH] Pause Here and [EK] Enter Keyboard, but you can change page width and length, set margins, center, add headers and footers, indent, skip lines, number pages, do mail merge and more. Just beware a little because not all the AppleWorks conventions are strictly followed. If you leave out the 'Underline End' carat '^' at the end of a paragraph, the rest of the page has everything underlined.

SuperFonts also offers other new commands (eg <ib> = italic begin). You can 'tab' to absolute locations from the margins (eg <t2> = column 2). This makes it possible to line up columns even when you're using proportionally-spaced characters.

You can mix fonts with high resolution images and with Dazzle Draw type double high resolution images. The position is defined with screen grid references. This is not as easy as PP.GraphMerge Cut and Paste, but of course the print quality makes up for all that. The results of combining graphics and text can be quite stunning, the fact that you can use SuperFonts to combine the 17k SuperGraph images with text is one of the most powerful features of the package.

Again the process of printing to screen or printer is so similar to AppleWorks as to be very easy to learn. [Print from? Beginning Page Cursor] is just like it says with additional feature that you can print from page number to page number. You are also given an extra menu enabling printout to be Tall, Reduced by 50% in print quality High Standard or Draft. Everything else works just like Appleworks.

The manual claims that fonts are

Macintosh fonts and similar to those used by the GS. I have been able to try on or two GS fonts and they work. SuperFonts supports fonts up to 127 points size. I have not discovered a font editor that works on the Ite, though Beagle say they have a universal font editor in the pipeline. It is perhaps worth mentioning that most fonts include a wide variety of special or foreign characters which are brought up by level com-

## TimeOut SuperFonts AppleWorks enhancement Processor files in any com leaving AppleWorks!

**That means you can print  
variety of sizes (6 to 127**

**Chicago - The quick brown  
Geneva - The quick brown f  
Los Angeles - The quick bro  
Courier.9- The quick brown fox jum  
Monaco - The quick brown  
New York - The quick brow**

## Venice.28 -

### A selection of font samples

mands <x2> or <x3>. It is a shortcoming of the manual that there is no systematic reference section describing the fonts in detail and the only way to discover what you have is to explore.

UTILITIES allows you to very easily define the ProDOS locations of fonts and pictures. It must said that you have to be really careful about how you do this. Appleworks forgives almost any ProDOS indiscretion. TimeOut looks so much like AppleWorks, that it comes that much harder when lets you do it wrong and find out the hard way. An example of SuperFonts 'NonForgiveness' is in the 'Utilities : Configure : Locationoffonts' option. Just try (a) PROSEL/FNT or (b) /PROSEL/FNT/. SuperFonts needs it to be /PROSEL/FNT. You cannot argue with this because Pro-

DOS says it ought to be done like that but Pinpoint calls for (a) and argues if you try anything else. Prosel also likes (a). There is wisdom in the cry for standards.

Conclusion, absolutely recommended. An easily accessible professional and comprehensive addition to AppleWorks that really works with exceptional quality.

## SUPERGRAPH

This is a really powerful facility for the those mathematically or financially inclined. It now gives AppleWorks graphing facilities comparable with Supercalc 3a or Lotus 123 while retaining the AppleWorks user interface in an easy and consistent way. Data to be graphed has only to be highlighted from within the spreadsheet itself. A preview on screen (View Option) is there to provide a means of checking out your settings, scaling factors, headings and legends.

Although this TimeOut program best maintains the AppleWorks feel in its mode of operation, this is very much a program in its own right, and takes some getting used to. Working with a Spreadsheet on the desktop, there are 7 graph forms to

The manual is the longest and most comprehensive of the TimeOut range that I have looked at, and it needs to be.

The Options offered on invoking SuperGraph appear at the bottom of the screen which in most respects retains the normal spreadsheet look.

Type can be Bar, Line, X-Y, Pie, Stacked Bar (with exploded option), Area, and Hi-Lo

Data offers X A B C D E F

(Note X specifies the label that appears along the X axis at intervals which can be adjusted to avoid overcrowding, ie if an event occurred every day of the year you could choose to mark a day at 30 day intervals.)

View lets you quickly screen the graph in a high resolution graphics format.

Options provides means of entering the legend i.e. the symbols which represent data points. These options indicate the symbols that are used in Line, X-Y and Hi-Lo graphs. Symbols 1 through 6 correspond to data ranges A through F.

Titles enables the graph to be titled and subtitled.

Format allows the user to select a shading pattern or otherwise corresponding to each variable

ABCDEF or the background of the graph itself. Graph format also enables a background or symbols or both to be

selected as ordinates of a graph. Grid can be horizontal vertical both or clear. Scale enables X or Y axes to be specifically scaled, there is also a self scaling function which allows the program to pick the start and finish points of x or y ordinates automatically.

File enables one to record the graph settings and then under a default name REGRESSION.GF (1K) or to record the 17K pic of the graph itself. This latter can be combined with super fonts

Reset enables one to reset all the options scales data and types back to square one selectively xabcdef graph.

Print pulls up the normal Appleworks printout menu but also provides the option to produce graphs in sizes scaled 1 2 or 3. The number of copies then required can then be specified in the normal way.

It is also possible to reload a graph in picture or by using the settings.

If you exit Graph while the same spreadsheet is up, all your settings are remembered which is useful. There are two caveats to bear in mind from this benefit. You must select the 'View' option to display the graph on the screen before printing the graph again or it will not print correctly. You have to use the 'Reset Option' if you want to print a different graph form or cancel the previous settings.

Contains DATA CONVERTER. (see SideSpread)

## SIDESPREAD

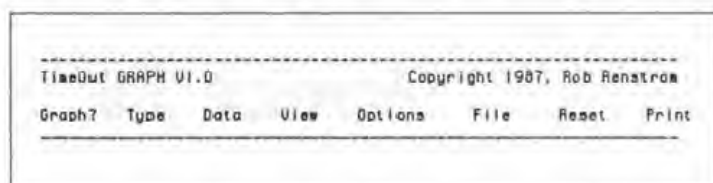
This accessory works deceptively well, is easy to operate and consistent with AppleWorks. The UTILITIES option gives you 8 Monaco fonts (6 - 24) and 8 Courier fonts (9 - 28) to choose from.

There is no Preview, but you can select rows column block just like AppleWorks. In fact once you are in SideSpread it is difficult to tell you are not still in AppleWorks. When you print out you have the option of going tall or half size, and a final screen that tells you how many lines you have identified and how many lines you can get in a page. If it does not fit you can always change the font size to compensate. The print quality looks good and surprisingly fast for graphics printing.

SideSpread contains DATA CONVERTER which will transmit Spreadsheet information onto Data Base or the other way round. The data selected must be in the clipboard. There is a benefit if you have the Applied Engineering desktop expander which considerably increases the amount of data handled. I have tried the facility on a IIc fitted with Z-RAM Ultra and enabled the full potential of Expanded Desktop with the UTILITIES option 'Using the Applied Engineering expanded clipboard [Yes]'. This is a very nice feature I have long wanted. (In the past, I have been able to do this using a complicated Macro to go to text files and back).

To illustrate that system works I have prepared 2 trivial examples (see over).

The reader will have to accept that all details of the data base have indeed been transferred to the spread sheet, and that this can only really be demonstrated in a SideSpread document. In other words the DATA CONVERTER allows you to print



choose from, 6 sets of data to plot, 36 legends to identify data. You have control over scaling factors, formats which correspond to AppleWorks conventions (ie Dollars, Percentages). There is no colour but the range of backgrounds, grids and fill patterns is extensive. Two additional configuration options allow you to choose separate Label and Title fonts. The Label font is used for the axes labels, sub-title, x-axis/y-axis titles, and Legends. The Title font is used for the Main graph title. There is a 'View' facility to see the graph on screen before printing in one of 3 sizes. You can just save and recall the graph settings which correspond to a specific spreadsheet or you can save an entire graph as double high resolution PIC which can be reloaded or incorporated in a SuperFonts document.



File: Spread.Data

Page 1

Spread/Data

Bikes	12	68	20	92
Accessories	29	13	30	59
Safety Gear	12	18	15	22
Clothing	21	31	25	41
Barclays Bank	Prime A/C Office	PO 125	Northampton	NN1 1SU 0604/2528
Barclays Bank	Prime A/C Office	PO 125	Northampton	NN1 1SU 0604/2528
Barclays Bank	Farnborough	368 Crofton Rd	Orpington	Kent BR6 8NH 0689/5783

a data base sideways by first converting it to spreadsheet, making this part of the package a very handy tool.

On the face of it SideSpread is a simple utility which is available in a number of stand alone programs, but it is part of AppleWorks and has an ease of operation and speed of printout which I have not seen bettered. I recommend it highly.

All considered all 4 TimeOut accessories tested performed reliably and well. There are a few areas of inconsistency, no doubt these will lessen as upgrades appear. Print speed and quality are well ahead of anything I have handled so far. Each product tested is worth having. There are areas where the stated capabilities of TimeOut fall short of what is actually available and I believe this should be clarified both in the text of the advertising and the text of the manuals as well as the notes on disk.

(STOP PRESS. There is now new version of FileMaster (V1.2) which amongst other things uses the [OPEN-APPLE Q] in the conventional AppleWorks user interface.)



File: Data.Spread

Page 1

Company	Address	2	City	Zip	Telephone
Bikes	42	68	20	92	
Accessories	29	13	38	59	
Safety Gear	12	18	15	22	
Clothing	21	31	25	41	
Barclays Bank	Prime A/C Office	PO 125	Northampton	NN1 1SU	0604/252891
Barclays Bank	Prime A/C Office	PO 125	Northampton	NN1 1SU	0604/252891
Barclays Bank	Farnborough	368 Crofton Rd	Orpington	Kent BR6 8NH	0689/57833

Illustration of the transfer of data from Spreadsheet to Data Base

## MacCadd -

The Intelligent Software Diagram Editor



logica


MacCadd Version 4 is a powerful tool on the Apple Macintosh for the production of software design diagrams.

- \* Quick and easy to use
- \* Output suitable for reports and presentations
- \* Supports many of the current design methods such as Yourdon and SSADM
- \* Supports any user defined diagram type
- \* Can be customised for the users own requirements

For more information contact: MacCadd Marketing  
Logica UK Ltd  
64 Newman Street  
London W1A 4SE

Tel +44 1 637 9111

## Apprentice C for Apple// DOS

 Apprentice 'C' (App.C) ver 1.06 was kindly supplied for review by MGA and consists of an unprotected D/S 5 1/4" disc and a loose leaf manual in a neat clip binder. MGA currently charge only £19.00 including VAT & delivery!

App.C is written by Manx Software Systems of New Jersey, U.S.A. who also supply the Aztec 'C' implementations. App.C is designed for learning, developing and testing C programs. There is no Dos on the master disc. First boot a Dos 3.3 master, copy the disc, then Brun SHELL. You are now in an environment called the SHELL which looks like UNIX. Being used to Dos 3.3 and Prodos, the SHELL is a marvellous change. Removing, copying and printing files, is a doddle. Listing to the screen, another file or a printer is easy, as follows:-

```
'cat mylist'
'cat mylist > my2ndlist'
'cat mylist > pr:'
```

There are 16 disc operating commands built into the SHELL. Text files containing SHELL commands execute the commands sequentially. So type a name in, the SHELL checks to see if it is a built in command, if not, it looks for a disc file of that name, if an exec file then executes the commands, if a program then run it, if none of those things then an error message of some sort.

One thing any aspiring 'C' programmer will need regardless of which implementation being used is The White Book or to give it the correct name, the C programming language by Brian Kernighan and Dennis Ritchie. You must have it. It contains the definitive description of 'C'.

Having got the SHELL up and running, you may configure your working disc using CONFIG. This is simple question and answer session and takes a minute or two at the most. I configured my copy to

run on a 64K ITT 2020 with Applesoft Roms (anyone remember?) 40 col. screen, no lower case or single wire shift key mod. quite happily. Then to run on an unenhanced //e 80 col card also with no problems. CONFIG also knows about the Videx Videoterm and the Smarterm, as well as the //e 80 col. card and the default Apple screen. "For other screens you must explicitly define the control sequences for operations that it supports" to quote the manual. CONFIG is used to set the SHELL to use your printer as well. You can play games with line feeds after returns or not. High bits on or off as you will, even 'or' in a hex 80 with each char if such an obscure need arises.

VED (Visual Editor) comes next. A text file editor suited to formatting C source files. The only facility I miss is automatic search and replace. One can search but you have to type in to edit. Moving text is OK. The contents of the 1000 character yank buffer is retained across files as well as within files. To exit VED either write the file to disc and quit, which takes you to the compiler or explicitly quit to the SHELL without running the compiler, or explicitly clear buffer and prepare for the next named file.

Assuming you have just quit, the default App. C compiler called AC automatically compiles the file last written to the disc with its name in the VED buffer. Any mistakes in your source and the compiler aborts, calls VED and leaves the cursor as close to the error as possible, leaving an error message on the status line. There are 125 possible errors and 9 fatal errors described in the manual. The compiler is very quick, the library is in memory, there is no linking and assembling to do. The compiler does it all in one pass.

There are two compilers and two matching run time systems called AC, AC.RTS and ACGR, ACGR.RTS respectively. Both use standard I/O and Utility

---

**Apprentice C is a  
beginners introduction  
to C programming -  
Mike Tickle finds it  
excellent value.**

---

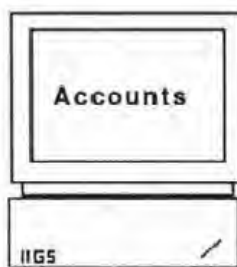
---

**Apprentice C is available  
from MGA Microsystems,  
Pear Tree, Appledore, Kent  
TN26 2AR. The price is  
£19.00 inclusive of VAT.**

---



# *Bidmuthin's A-Z of //GS solutions.*



A complete GS accounts system, seamlessly integrating sales, purchase and general ledgers with invoicing from stock, stock control & management reports. Brilliantly easy to use and fast. Designed for the non accountant.

Options include RAMcaching & macros.

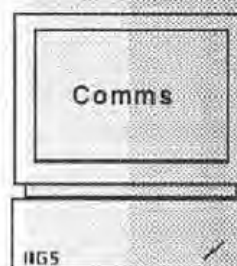


Yes, once you've drawn a few boxes you run out of great ideas.

Or do you?



Based on AppleWorks expanded and enhanced with as many options and utilities as you need: Spelling Checker, Macros, Comms, Graphs etc. etc. All fully installed with mousedesk & selector to give a price/productivity performance few other systems can hope to match.



An answer to the 'joys' of trying to communicate with the outside world. Datalink, an internal, 1200/1200 baud Hayes compatible AA/AD modem complete with software. Also external modems and a variety of software.



TopDraw is a magnificent drawing program for the //GS only. It is object orientated, with masses of features. Like a colour version of MacDraw. Integrates with Multiscribe for desktop presentations.

Filing  
Graphics  
Hard Disks  
Integration  
Joysticks  
Hard disks  
Konsultancy (we may be good technically, but lousy at spelling)  
Linking  
Music & Multitasking  
Number crunching & Networking  
Options  
Printing  
Quality support  
RAM  
Science  
Training  
Utilities  
VIP Professional  
Word Processing  
Xtra memory  
Zork Trilogy - after that lot everyone needs a break!

These are just some of the systems we can offer. If you have a problem, why not let us recommend an answer. We guarantee it will meet your requirements.

**Bidmuthin Technologies Ltd.**  
Brent House  
214 Kenton Road  
Harrow  
Middlesex HA3 8BT  
Telephone 01-907 8516

**Apple Authorised Resellers**  
Level 1 Service Centre  
Apple // series & Mac

Routines as described in The White Book, plus System I/O. AC can also use the floating point math functions but not the graphic functions and ACGR uses the graphic functions and not all the maths functions. This is because of memory constraints. The scanf, sprintf and sscanf functions are not used by ACGR either. The User executable code called pseudo code can be up to the limits of 3 sizes. The RTS for Graphics interprets code of a fixed size, this is the smallest at 5600 bytes. Use the graphics compiler without graphics (compiled with -N option) the size is increased to 14000 bytes. Using the default compiler the size is 8K long. This code is interpreted code not native 6502 code. The program generated by App.c is a single contiguous block of memory from Hex800 to the base of the I/O buffers just below HexC000.

The manual is much improved from the original Dos 3.3 Aztec manual being physically smaller, clearer and has an index. There is a very helpful section on writing programs in C, with examples of common problem areas. My brief de-

scription by no means covers the wide scope of this package. It is a substantial system.

I already use Prodos and Dos 3.3 Aztec systems, and the compile assemble link time cycle can be a drag if the program proves difficult to write. Using App.c would speed up development time. The listing attached to this review was developed on App.C and took 1 minute 28 seconds to compile, including loading the compiler, source and writing output to disc. I am by no means certain my program does what is intended yet but that is my fault not App.C. It is a tool based on an idea in a book by Robert Ward called Debugging C published by Que. The tool points to the Hex address of the active function, its secondary return address and the calling functions secondary return address on the pseudo stack. The dumpst function is totally different from Robert Wards in that it is Aztec specific and uses the information provided by Manx on zero page usage. The idea being that if your program inexplicably crashes then recompile with the appropriate debugging functions and

definitions included with calls inserted where suspicion suggests. Then recompile again and run. The results should be illuminating not confusing! After using App.C, I gladly confess I am delighted by its speed, it will make it easier to use big brothers Prodos + Dos 3.3. Aztec C. Beginners to 'C' or users who do not require floating point math & graphics in the same program and/or do not want to overlay modules will find App.C a very useful low cost system.

The only warning I would give is to GS owners, see it working using the printf math function on a GS before you buy (it should run in the Apple // mode). I have heard rumours of difficulties with using Dos 3.3 Aztec on the GS and I have had difficulty with Prodos C on an unenhanced //e though I think they are nearly solved. Manx do not have unenhanced Apples. Prodos and Aztec C on an enhanced Apple uses the zero page differently to unenhanced Apples, this gives no problems till the math printf function is used. The reverse of that problem may be Dos 3.3 Apprentice/Aztec C on a GS.

## Debug listing

```
#include "stdio.h"

/* stack pointers */
/* frame pointers */
#define sp1 (*(char *) 0x02)
#define sp2 (*(char *) 0x03)
#define fr1 (*(char *) 0x04)
#define fr2 (*(char *) 0x05)
```

```
unsigned char *add, *sp;
```

```
main()
{
void level1();
/* test function */
printf("napproaching first call\n");
level1(1);
printf("napproaching second call\n");
level1(6);
printf("napproaching third call\n");
level1(2);
exit();
}
```

```
/* build address */
```

```
long address(l, h)
unsigned int l;
unsigned long h;
{
return((h << 8) + l);
}
```

```
/* print stack & frame ptrs */
```

```
void dumpst(id)
char *id;
{
unsigned long var, var2;
long address();
```

```
printf(" %s\n", id);
```

```
var = address(sp1, sp2);
sp = (*(unsigned char *)&var);
printf("Pseudo stk %x ", sp);
```

```
var2 = address(fr1, fr2);
add = (*(unsigned char *)&var2);
printf(" frame-->%x ", add);
```

```
printf("\n");
}
```

```
/* test function */
```

```
void level1(depth)
int depth;
{
void dumpst();
void level2();
char buff[15];
```

```
dumpst("level1 entry");
if (depth > 1) level2( depth - 1, &buff);
dumpst("level1 exit");
}
```

```
/* creat an err with loop > 15 */
```

```
void level2(depth, pnt)
int depth;
char *pnt;
```

```
{
void dumpst();
void level3();
int i;
```

```
dumpst("level2 entry");
if (depth > 1)
{
for(i = 0; i < 15; i++)
{
*pnt++ = '\0';
}
level3( depth - 1);
}
dumpst("level2 exit");
}
```

```
/* recursive test call */
```

```
void level3(depth)
int depth;
{
void dumpst();
```

```
dumpst("level3 entry");
if (depth > 1)
level3( depth - 1);
dumpst("level3 exit");
}
```





## Publish-It!



Publish-It!, a desktop publishing program from Timeworks, is a splendid addition to the wide range of software for the Apple II series. It is versatile, powerful, enjoyable, and reasonably easy to learn to use. Its printed results can be really pleasing. The program is essentially 'WYSIWYG', but with some minor exceptions. (For instance, with some type fonts the text printed out on paper is more attractive than the screen display suggests).

### What is supplied, and what is needed

Publish-It! was supplied to me as four 5.25" disks (ProDOS, unprotected), together with a User's Manual (see below). A set of (two) 3.5" disks is also available, at a small extra cost.

To use Publish-It!, you need an Apple II GS, a IIc, or an enhanced IIe (at least 128 K). A mouse is virtually essential. You can use a joystick instead - but I found this less easy to control sufficiently. With the 5.25" version, I strongly advise using two disk drives. A wide range of dot matrix printers can be used with Publish-It!

### General description

Documents created with the aid of Publish-It! can contain six types of 'object' (text columns; graphics frames; horizontal or vertical lines; rectangles; round-cornered rectangles; and circles). By using the mouse, individual objects can be selected, changed in size, and moved as desired, and can be placed on top of others if required.

The order of stacking of such objects can be changed if you wish. Objects can be copied, cut, pasted, or deleted quite simply. On-screen rulers are available. You are not limited to one-page documents; several pages can be produced in one operation.

The normal screen display of Publish-

It! shows a series of 'tools' along its left hand side, nine pull-down menus (including 'Help') along the top edge, and scroll bars and boxes along the other two sides.

When certain menu options are selected, 'dialog boxes' appear on the screen, inviting the user to enter information or make further choices. There are four size options for the screen display. With the 'Show full size' view option, the text and graphics appear on the screen in the same size as they will be printed on paper. Besides this, and the 'Show double size' and 'Show half size' choices, there is also a useful 'Size to fit' option which allows the user to see a representation of the whole page on the screen (although in this case the text is no longer legible, and the graphics are merely shown as grey boxes).

Most of the tools and menu options are selected by using the mouse. However, there are quite a number of 'Open Apple' commands ('Quick Keys') which allow you to make choices via the keyboard, if you prefer. Incidentally, I found that use of the Open Apple key plus the various arrow keys was a convenient way of moving the cursor to highlight chosen portions of text (e.g. in order to change the type style or size). This particular point did not seem to be mentioned in the User's Manual. Menus, and items within them, are highlighted or dimmed, depending upon whether they are active and available at any given time.

### Text

Text can easily be put into text columns (produced as objects) by typing in from the keyboard. Also, word processor files created by AppleWorks (or by Bank Street Writer) can be 'imported' directly, as can ASCII text files from other sources. It is very easy to arrange text in two or more columns. If you wish, you can ar-

---

**Dr. Peter Stark looks at a new desktop publishing program for the Apple II range.**

---

---

**Publish-It! is available from MGA Microsystems, Pear Tree, Appledore, Kent TN26 2AR. The price is £99.95 inclusive of VAT.**

---

range for text to flow automatically from one text column to another. An important feature is that if you place another object (such as a graphic) on a column of text, the text will flow round it. If you change the positions of the graphics, the text readjusts itself.

As with other good word processors, it is easy to edit and format the text to suit your wishes. Six fonts are supplied with Publish-It!, and each of these can be produced in different sizes and styles (Italic, Underline, Outline, Super- and Subscript, and so on). For any given font, you can cycle through its available sizes and type styles so as to see on screen what the effects of the various alternatives are.

Different fonts, type sizes, and type styles can all be used within any column or page. There are various Find and Replace possibilities, and also 'Sticky Space' and 'Soft Hyphen' options. (The 'Sticky Space' facility is useful if you want to make sure that a particular set of words will be treated as an indivisible group, and will not be split between two lines. 'Soft Hyphens' are useful should you wish to ensure that if a given word needs to be split at the end of a line, a hyphen will be inserted at the point which you prefer. If the text layout is then changed so that the word no longer needs to be broken, the hyphen will disappear). Margins, justifi-

Double HiRes graphics into Publish-It! from other sources. In addition, a fair number of graphics are included with Publish-It! as artwork. The actual pictures only appear on the screen when the 'show full size' option has been chosen. With the other size options, the graphics just appear as shaded boxes.

Further attractive effects can be produced by using the various graphic object tools (horizontal or vertical lines; rectangles; or circles). You can choose from various pen widths, pen patterns, and fill patterns, and you can even design new patterns if you wish.

## The User's Manual

The manual is about 160 pages long, supplied in a ring binder. This is not my favourite form of binding, but nevertheless the manual does seem hard wearing and acceptably attractive. I found the manual quite easy to read and understand. Its style is relaxed and friendly, but also clear and informative. In addition to the instructions for use of Publish-It!, a glossary and a lot of helpful definitions are provided, as is a 'Quick-Start Mini-Manual'. The package also includes some down-to-earth advice on graphic design, as well as several sample documents.

## Printing, and the printed results

The speed of the printing operation depends upon the amount and complexity of the material being printed. Simple letters, for example, are printed out quite rapidly, but a page containing several different type fonts etc. may take several minutes. With the 5.25" version of Publish-It!, the two disk drives have to work hard, as there is frequent disk accessing of both. If your Apple has sufficient memory, it is worthwhile first to load all the Publish-It! fonts into RAM.

Overall, I have been very pleased so far with the quality and appearance of documents produced with Publish-It!, using dot matrix printers. Both text and graphics have usually come out very well. All of the text fonts that were supplied look pleasing, and I felt that some of them (e.g. 'Ravinia') are particularly attractive. In the PRINT Dialog box, 'Double Strike' can be chosen, if one wants extra contrast.

The User's Manual mentions that a pack is available which would enable the use of a laser printer.

## Overall comments

I liked Publish-It! very much. As a desktop publishing tool, it proved to be powerful and versatile. There are many built-in facilities, and I have not tried to mention all of them in this review.

In view of the numerous options which it offers, it is not surprising that learning to use Publish-It! takes a little time and perseverance, but not to an excessive extent. After a reasonably short while, in fact, I found it hardly necessary to look at the



cations, and spacings (between words, letters, lines, and paragraphs) can be altered as you wish.

## Graphics and graphic objects

It is also easy to import HiRes or

manual any more. My only (small) quibble is that if you type fast, the screen display is unlikely to be able to keep up with you, and some letters may be left out as a result. (I have had similar problems with Multiscribe, another very good word processor). Also, do take care not to be trigger-happy with the delete key, otherwise you may well see too much of your typed-in text disappear inexorably as you watch - an upsetting experience.

These are only minor aspects, and I can certainly recommend Publish-It! as an excellent piece of software which gives good results and is fun to experiment with and to use.

With this product, you don't need to be an expert on computers or on graphic design in order to turn out documents (letters, reports, newsletters, etc.) that will be found attractive and impressive.





## 'Open-Apple' a winner.

London N19

Dear Jim,

I am a current member of the group and had a couple of points for you. I wonder if I may have an advert in the members small ads? ...

....I also enclose a copy of the newsletter Open-Apple because there is a first class article on the GS that is quite unique in its clarity, style and information. It's headed 'IIGS System Disk 3.1 available' and in fact deals with much more. There's nothing that I have seen in the Apple II press that deals with this matter or much else for that matter so well. ....

.... if I may be so bold it would be a fitting sweetener for permission if you as editor could offer a small advert for the newsletter for a couple of issues, since the ads that I have seen in the U.S. press are small, illustrated and witty. .... theres nothing like the Open-Apple, it keeps our older and younger machines in the game, has lots on AppleWorks, its written well, its sent o overseas subscribers at no extra cost, payment can be by credit card from here and on and on.

It seems too that those of us still with the II series are shy in writing well for the journal, me included.

Best wishes,

Huw Price

*Reply: Thanks for the letter Huw, small advert is entered as requested.*

*It's obvious that great minds think alike because we have just concluded a deal which will enable us to put your suggestion into practice. Tom Weishaar could not have a better recommendation than that you have given and as an old Apple II user / editor I wish I could do as well. Seriously though Tom does a fantastic job and I endorse everything you have said. Hopefully other members will do as you have and subscribe to Open-Apple NOW. Cost is just \$24 per year AirMail and it beats Apple User hands down.*

## Write to us - its easy

Members are invited to send letters, tips or article on any Apple or mac related subject.

The magazine is your mouthpiece as well as a place to get information.

Just send your letters, tips or articles to



The Editor.

Apple2000, P.O.Box 3, Liverpool L21 8PY



# Letters

## 'II users write' - 1

Dear Jim,

At long last you say! Yet another Apple II Member User is finally responding!

Having read the letters contained in the February, '88 issue of "Apple2000" I felt that although time with other conflicting priorities generally prevents me from actively participating in the affairs of the Group I should at least now communicate.

I share the views of most of the members who wrote about the wish for Apple II users to be recognised.....

In the first instance I would be only too pleased to offer my services to members who are experiencing problems with their Apple IIe and/or software. I have been using an Apple for a few years now and can assure members that I have experienced considerable difficulties in trying to accomplish many of the things I wanted to do, owing to the limitations of hardware cards and software. Over this period I have concentrated in various ways in which to overcome the problems with some reasonable success. Some of this has been attributed to the help, support and services of Apple2000 (BASUG) members including Officers of the Committee to whom I have been most grateful. Doubtless, therefore, it would be perhaps helpful to share the issues with other Apple II members, so that they can gain the benefit of several years of experience.

By way of a small example, the letter from the member who is experiencing problems with Format-80. If he would like to contact me I would be pleased to help whether it be in DOS or ProDOS.

I have enclosed some examples of work completed on an Apple II on the Prestel Service. I am sorry for the poor quality but this is not a failing of the IIe but bad quality on the photostat machine.

I am looking for help with digitising/scanning pictures and artwork for use on the Apple IIe - anyone able to help. A reward is offered.

Gordon P. Owen

*Reply: Thanks for the letter and the support on the Apple II side, I hope that you will get a reply to your question. Dave Ward I am sure will gladly place you on his EXPERTS list.*

## 'AppleWorks problem'

London N19

Dear Apple2000,

The revised edition of AppleWorks, the 2.0 version has been with me for some time and I am having one particular problem with it. Succinctly its saving a large file to an almost full disk. Here is my example and grief:

When I load a large database, in this case a 17k insurance list, set up last year in AW 1.3 which has not been used since. I can of course amend it in AppleWorks 2.0. But I then need to save it to the same 5.25 disk. In this case the disk is fairly full, and the new AppleWorks says 'Insufficient room on this disk - is it O.K. to delete the old copy?'

I have answered 'Yes', and the new file is saved, apparently. The problem arises the next time you want to load the file, it reads 'Getting problems trying to read FILENAME on /apw' or volume.

It is LOST and so is my insurance list. For future use the way around this is now to delete the older file seperately.

Now this problem which I had thought was due to my own inability or equipment set-up has been highlighted two or three times in the Open-Apple newsletter and it seems that I am not alone. A correspondent there in the March issue thinks that AppleWorks may be messing up the file header while doing the automatic delete and save.

Is anyone else getting problems with version 2.0? Can anyone think of a way of rescuing the insurance file?

Best wishes

Huw Price.

*Reply: Thanks for the letter, I hope someone can come up with the answer. Your reference to Open-Apple is timely as I have just received the March issue which will be published in the June issue of Apple2000. If members wish to receive their very own copy of Open-Apple please see the special offer advert elsewhere in this issue.*

## 'Best - bar none'

Hawkhurst, Kent

Dear Jim,

The February edition of Apple2000 has arrived and is the best publication in the field, - bar none!. Separating items about the Mac from those for AppleII was a good idea, since one now knows where to look. A few points of interest:

1. The ZIP chip, which I also saw advertised in A+ looks promising. I even thought of buying one to see what it would do, but gather from your wording that it is not available yet. Not a case of jam tomorrow, I hope.

2. Two DTP programs were mentioned, Softsync's Personal Newsletter, and Laser-writers Publish It. Any hope of a comparative review, with price?

3. Is Dave Ward running the help desk all by himself? He has been most helpful to me in the past and I am very grateful. Ditto Steve Morrisby.  
Keep up the good work, you are doing very well.

Yours  
M.J.Worth

*Reply: Thanks for the compliments. Answers to your questions.*

1. The ZIP chip I am informed is vapourware at present and is likely to remain so for quite a while. Sorry it did look a good idea.
2. See inside this issue for both reviews.
3. Yes and No. Well Dave is the Head Office for Help and he sorts out much more than he would like to admit, but he does have a team of EXPERTS to fall back on. By the way anyone can help - just give Dave a ring.

## Keep up the good work

North Queensferry, Fife.

Dear Sir,  
Keep up the good work, the journal has come a long, long way since I first knew it.

Yours faithfully  
Mike Manekshaw

*Reply: Thanks for the compliments, I hope the Firth of Forth is still as nice as when I worked a few miles west of the bridge?*

## 'II users write' - 1

Ilford Essex

Dear Sir,  
I have been interested to read the correspondence concerning the lack of articles on the Apple II series appearing in the magazine. Having purchased a IIGS in December 86 for use in our small business (after at least three years searching for a computer which could be operated by my wife and I, starting as complete novices in our mid-fifties) the equipment has proved "friendly" and done all we have asked. However, we have been disappointed with the lack of interest in the equipment by the main dealers whom seem only interested in the Mac range which, no doubt, is a more profitable exercise. Certainly, the IIGS was expensive compared with other small PCs, but we had hoped that the cost would be justified by back-up from the Apple Organisation with an increased range of software for business use. This did not occur and we were beginning to despair of being able to proceed beyond AppleWorks (excellent programme though it is). Luckily for us we feel we have found a friendly dealer\* through an advert in the magazine and we have already upgraded the equipment to enable us to operate a limited 'desktop' publishing arrangement and we anticipate shortly operating a full accounts programme. Not being computer literate we normally feel at a disadvantage when attempting to discuss our

# Letters

set-up with younger experts but are now able to get positive information and answers which we can understand and employ.

I still feel we were right to purchase our IIGS, particularly after having sat alongside an equally aged friend struggling to find his way around an A...d Manual. There must be a not inconsiderable market around for the II range for prospective novice users who are scared off by complications of other equipment at present available but who have never heard of 'Apple'. In the meantime I laud the praises of our IIGS and we will do all possible to support our newly found II interested dealer.

\*Bidmuthin  
Yours faithfully  
Derek Cox

*Reply: Why can I say, Bidmuthin have distinction by being an Apple2000 Recommended Dealer - they DO give good support and that counts for a lot especially when you are a novice!*

## 'It could be better'

Stockport, Cheshire.

Dear Jim,  
As a longstanding member of BASUG (Apple2000) I have always looked forward to receiving the journal especially since you took over as Editor because it has improved enormously. The content is excellent but I have just one criticism - the spelling and grammar. For example, the February issue contained my review of Executive Office which I wrote with Word 3, using the spelling facility to check for errors. I hope you will allow me some space to disclaim responsibility for the errors in the captions to the illustrations ("whats" instead of "what's" and "seperate" instead of "separate" - you pare an apple, you don't pere it). Indeed, now that the Grauniad (Guardian) has gone over to computers, Appel 0200 could take over its mantle as the journal with the most errors. John Dyer's article on Hypercard must take first prize with three "it's" instead of "its", an "its" instead of "is", "base's" instead of "bases", "you" instead of "your", "advise" instead of "advice" and several grammatical errors.

Most spelling checkers will accept some of these errors but Sensible Grammar can detect many common grammatical errors and you can add your own phrases to its list of 2000. I reviewed the Apple II version of this product for Apple User and I would be delighted to review the Mac version for Apple2000. Again, congratulations on the journal. Keep up the good work.

Yours sincerely  
E.G.Wood.

*Reply: Thanks for the letter, yes I know the spelling and grammar is not quite right but hopefully the new editor and his team will get it right. I have spent much of my time struggling to keep the material coming in and trying to make the magazine more pleasing layout wise. If I were to carry on as editor, the next obvious thing to tidy up is the grammar and spelling. However I am sure the new editorial team will get that right!*

## 'II users write' - 2

Earls Barton, Northants

Dear Sir,  
In response to your request for suggestions regarding the Apple II content of your magazine, may I suggest that you set aside a page for new readers. This page would probably not change much between copies, giving a statement of your objectives, what the magazine has to offer and what to do to get help. A description of the disc library, and what it is for, would be of use to old members as well as new. Still on the subject of new readers, could you be more specific in your articles - for example, what is a 'Uni-Disk', and what does it do, and not do?

As one who did his 'apprenticeship' with Apple IIs on the other side of the Atlantic, I'm appalled at the lack of support for this product by Apple UK. And I don't expect any better from the new managing director, who has experience of Macs only. The lack of capitals in the job description is deliberate. I am delighted that you are getting together with a US publication to increase your coverage. No inference intended that they do things better over there; just differently. This might trigger off all sorts of new approaches and ideas that will benefit us all. With no interest being shown by the makers of Apple IIs in this country, we need all the help we can get. You, as a magazine, are probably our last hope, because the history of the brand shows that it was the owners of Apple IIs that opened up the possibilities and made the machine, and for that matter, the Company.

Yours sincerely,  
Jeff Clayton.

*Reply: Thanks for the letter, you are not alone in your thoughts about the treatment of Apple II users. Hopefully our tie up with Open-Apple will help keep the Apple II pot on the boil!*

## 'Help for Mac Users'

London N5

I am writing this in a hope that it will help users changing from other machines to the Macintosh.

Macintosh Users can now use their old printer with a Macintosh instead of paying out £450 for an Imagewriter II. The options available are:

1. Us Epsart (a driver for Epson Printers) £35



You will also require an Epson Serial Interface (£40) and Imagewriter I cable (£20). It works fine but will not work with Hypercard or spoolers. The company that published Epstart have ceased trading so no upgrading will be possible.

2. Use "Grappler" printer interface £70. The problem with this is that it uses an American power supply and restricts you to certain printers.

3. Sell your old printer through Micro Mart and buy a cheap ImageWriter compatible printer from Morgan Computers, Tottenham Court road, London. Olivetti DM100/3 costs just £150. Works with latest Imagewriter driver (2.6) and the only problems are that the ribbons are small, expensive and hard to find. (£7.50 from Olivetti, £6 from Morgan)

I have a DM100/3 and am satisfied with it. For faster speed you can use the Olivetti DM280 (£195) but its print quality is not good. I hope this information is helpful to other members.

Yours sincerely  
Saari Omar.

*Reply: Thanks for the information - I hope that it is useful to members who intend to purchase a Macintosh. Anyone else with tips is invited to let us all know of them through our letters pages.*

## AppleWriter II rules OK

Corwen, Clwyd

Dear Jim,  
My February issue of Apple2000 arrived yesterday morning. As a user of an Apple II+ I have to agree with many comments that ALL Apple orientated magazines carry reviews, news and information on current items, however in many ways the ageing II+ cannot be called current. (How many avidly purchased and read motoring magazines carry articles on vehicles manufactured in 1980?).

I suspect that "Not Happy", Mr R Cook of Sunderland is like many other members of a great many clubs, in general it's what they get out of the club that counts and they happily ignore the fact that the club is only as strong as the members. The output of the club is the sum of the input of the individuals.

The many hours of dedication of the few who do the work are frequently appreciated by those who know just what is involved, even if we are often less vocal proportion of the membership!! Keep up the good work for the sake of the rest of us!!

Any other Apple II+, or Macintosh users in the North Wales and surrounding areas, we feel a little lonely out here sometimes.

AppleWriter II - the 'doyen' of W/P programmes?

Much has been written about w/p since this programme was released, however, in many ways I still prefer it to anything else (not that I have many such packages). Yes, I know this has been written on a Mac, but the AppleWriter II still has many advantages.

Maybe I have just got used to the "embedded"

# Letters

command system, but it does have distinct advantages. Primarily because the commands are translated into ASCII which can be extremely useful for data transmission and storage. In many ways too the embedded commands are simpler to use than complicated "mouse" driven menus. To receive a corrupted TEXT file with embedded commands can be a great deal simpler for the illiterate computer user than giving up in disgust after spending hours trying to find out what obscure resource held a ruler setting on the Mac. I must admit, whilst a "mouse" does have its uses, the primary operation of a w/p package is the use of the keyboard, it is inexcusable that ANY mouse operation is not duplicated by some form of keyboard command.

In addition to simple w/p, my own Apple II is also responsible for printing a 150 page (A4) size Technical Manual, totally automated (except for a manual disk change), even to the extent that each page of each manual has the purchasers individual identification included. Something I cannot do with my Mac w/p programme. I would like to add a 3.5 disk to the II and that would enable me to complete the whole task TOTALLY automatically. Just one great advantage of the macros built into the programme. my only complaint (yes, there's always at least one) is why, oh why, did Apple use copy protection and a non-standard DOS?? If I had the time to discover what they had done I could make use of a 128k RAMcard mounted as an additional RAM area. (I could even avoid buying the 3.5 disk in that case). If anyone has got 'clever' with AppleWriter II I would be very interested to hear from them. PS - Some owners apparently consider the "mouse" is useful for keeping the cat quiet!!

Yours faithfully,  
Graham Hindley

*Reply: Thanks for a most interesting letter - hopefully you will find other Apple Users in your area - if you live in the North Wales area*

please contact the P.O. Box for Graham's address.

AppleWriter II was my main hobby horse all those years ago when I had a II. It is a powerful application if somewhat bemusing in some of its antics. However, as you rightly say it has very powerful features which would suite most w/p users.

## 'Basic Fix for Tom'

Peter Green has written in to explain the oddity in Tom Wright's BASIC listing from the last issue.

Dear Editor,  
with reference to Tom Wright's problem, the solution lies in either changing line 35 or line 50.

DOS 3.3 commands need to be preceded by a carriage return and the 'GET' statement in line 35 causes the problem. 'GET' unlike 'INPUT' does not require a carriage return from the user and so a 'PRINT' statement (which acts like a carriage return) should be included. The solution therefore is to change the line to:

```
35 GET Z$: PRINT: IF Z$ < "C" THEN 30
```

(In many cases a program will work fine without this addition, the reason being that a 'PRINT' statement is included in the program at some point between the 'GET' and the 'PRINT DS' and the user is unaware of the potential problem. In actual fact Tom Wright's program will work fine with just two (not three) 'PRINT DS' in line 60 and only one in lines 70, 85 & 86, the first occurrence in line 60 acting as the carriage return)

The alternative cure to the problem is to redefine DS to include the necessary carriage return.

```
50 DS = CHR$(13) + CHR$(4)
```

This latter method is often recommended but under certain circumstances can disrupt the screen display and so I prefer to add 'PRINT' after every 'GET' statement.

Finally, and on a different subject, I should like to express my wholehearted support for those members asking for more Apple II material in Apple2000 !!!!!!!!!!!!!

Yours Sincerely,  
Peter Grant


## Local Groups

Apple2000 has a policy of supporting local groups, this policy includes

1. Mailing of information to ALL Apple2000 members in the local area.
2. Helping with start-up of new groups.
3. Help in getting speakers to attend meetings.
4. FREE advertising in the magazine including listing in the Local Group Pages.

If you want to take advantage of these special services contact Tom Wright.

## Cirtech Promdisk Adaptor

 SPEED is what most computer users require; once one has used a disk drive one will be most reluctant to use tape and likewise once having used RAM disks you will find ordinary diskettes extremely ponderous. Apple IIgs users can now benefit from a battery-backed 256K byte card that can be attached to their Cirtech plusRAM-GS2 or plusRAM-GS8 memory expansion cards. Cirtech refer to this card as a PROMdisk adaptor

**Dave Ward reports on this add-on for the CIRTECH plusRAM GS2 and plusRAM GS8 memory expansion cards for the Apple IIgs.**

### Prices:

plusRAM-GS2 ( 256K) .....	£99.00
plusRAM-GS8 (1024K) .....	£249.00
Upgrade GS2 ( 256K) .....	£20.0
Upgrade GS8 (1024K) .....	£125.00
plusRAM PROMDISK ADAPTOR (64K) .....	£88.00
Upgrade (64K) .....	£16.00

from:  
**Cirtech (UK) Limited**  
**Currie Road Industrial Estate**  
**GALASHIELS**  
**Selkirkshire TD1 2BP**  
**Scotland**  
**Telephone 0896 57790**

The Cirtech PROMdisk Adaptor is a 'piggy-back' board that plugs into your plusRAM-GS2 or plusRAM-GS8 and the manual clearly describes how this is achieved with the usual caveat regarding static electricity. Installation is very easy, although the boards are rather a tight fit, but it took me just a few minutes to complete.

The adaptor is incompatible with very early plusRAM-GS2 or plusRAM-GS8 boards but this will not be a problem if you order both boards together and unlikely to be a problem anyway. If you have any doubt just quote the number of your plusRAM-GS2 or plusRAM-GS8 when you order. When the board is fitted you will notice that it is in line with slot 7 and may balk large cards being fitted in that slot such as Apple type memory cards including the plusRAM. Small cards such as the Cirtech CP/M PLUS card fit easily. Slot 7 is very popular for hard disk interface cards but I could not, unfortunately, carry out tests on such cards.

You can use the 256K bytes of memory on the Promdisk adaptor as a ROMdisk or as addressable memory. Most users will choose the first option so that they can have an 'auto-booting' Apple IIgs that runs the application of choice after switching on the machine. To enable the smartport to recognise the ROMdisk you must install its driver before you do

anything else. The 'plusRAM-GS' support diskette supplied with your plusRAM-GS2 or plusRAM-GS8 card enables you to do this and the very simple procedure is fully described in the manual. Next you will need to format the ROMdisk with the operating system that you will be using. Lets take a look at this:

**ProDOS:** You may use any disk formatter that will format all smartport disk devices such as Copy II plus (preferably versions 7.4 and greater), Mousedesk, Apple IIgs Finder or the ProSel Uniformat program. Remember at this point the smartport is unaware of the existence of your ROMdisk so do at least a 'cold-boot' (open-apple+control+reset) before loading your formatting program. I called my ROMdisk /ROM5 but you may use any legal name and then copy over the application of your choice. I used AppleWorks, as I suspect most users would, so lets take a look at this setup:-

1> Best use AppleWorks version 2.0 and copy over all the files onto your ROMdisk, remember both sides of the 5.25" diskette.

2> Since you'll have a plusRAM-GS2 or plusRAM-GS8 you can add the Cirtech enhancements now if you haven't already done so.

3> If you now switch the machine off then at least 10 seconds later switch it on again AppleWorks main menu will appear in about 5 seconds depending upon how fast you press keys when prompted.

4> As you have a clock in the Apple IIgs and all of AppleWorks is in 'RAM' the three key presses are unnecessary. Fortunately you can 'patch' the file APLWORKS.SYSTEM on the ROMdisk to cut-out these obsolete keystrokes. Here are the patches which are probably due to Alan Bird but arrived by other routes:-



Enter Applesoft BASIC and at the ] prompt type the following:

```
]PREFIX /ROM5 - remember I used
/ROM5 as the name of my ROMdisk!
]BLOAD APLWORKS.SYSTEM,
TSYS,A$2000
]POKE13271,44
]POKE14149,19
]POKE14468,44
]BSAVE APLWORKS.SYSTEM,
TSYS,A$2000,L
```

5> Now when you switch on your machine again the AppleWorks main menu will appear in just 3 seconds. With a 256K byte promdisk adaptor you will have 62K or less remaining.

I tried other applications such as Copy ][ plus version 8.1 and even games all of which worked perfectly. Unfortunately ProDOS 16 applications will almost certainly be unusable since they generally require more than 256K bytes. A pity since ProDOS 16 applications load so slowly from 3.5" diskettes!

Before we go onto Pascal lets look at the way in which the smartport of the Apple IIGs assigns the disks that it finds. The following table lists the way these assignments differ depending upon the startup device you choose from the control panel.

device present in slot/drive assignment

startup device	S5/D1 (.D1)	S5/D2 (.D2)	S2/D1 (.D3)	S2/D2 (.D4)
3.5 drive	3.5 drive	RAMdisk	ROMdisk	2nd 3.5 drive
ROMdisk	ROMdisk	RAMdisk	3.5 drive	2nd 3.5 drive
RAMdisk	RAMdisk	ROMdisk	1st 3.5 drive	2nd 3.5 drive

Please note that the numbers in parentheses (.D1) etc. indicates the assigned Smartport number. The startup device always finds its way to the head of the table but otherwise follows the order: RAMdisk ROMdisk 1st 3.5 drive. ProDOS 8 versions 1.1.1 or less will only see the first two drives in the list.

Pascal 1.3 also has this problem which is the reason for this small diversion. ProDOS 8 version 1.2 and later will see all the devices but the third and fourth will appear to be in slot 2 and the fifth and sixth will appear to be in slot 1!! If you are using an

Apple IIGs you really should be using the latest version - ProDOS 8 V1.4.

If you take a close look at the table you will see that if you boot up from the ROMdisk you cannot use Pascal 1.3 on a 3.5" diskette if you also have a RAMdisk.

If you want to use Pascal 1.3 you must 'kill' the RAMdisk from the control panel and then make the machine recognise it by switching the machine off and then on again. Now lets look at Pascal 1.3 :-

Pascal 1.3 is easy to set up. I used a 3.5" master diskette which boots up into Pascal 1.3 (128K version). If you want to use the 3.5" diskette don't forget to 'kill' the RAMdisk. Boot up your master Pascal diskette and press F for Filer and then V for Volumes on-line. With no RAMdisk the ROMdisk will be assigned volume #5 - best to check though! Press Q to quit the Filer and then execute the Formatter utility and Format volume #5. Next go back to the Filer and copy over all the necessary files from the application diskette. Thats it! When you switch on your machine you'll be in your application in a couple of seconds. Beware of a few older Pascal applications which only know of 5.25" diskettes, though.

To use Pascal 1.2 you'll require the Cirtech's Unimate diskette, in my opinion though you would be advised to use Pascal version 1.3.

Dos 3.3 users will need the Unimate diskette also to allow the ROMdisk to be formatted correctly.

The Cirtech CP/M version 3.0 system has very fast access from 3.5" diskettes anyway but you'll get a triple increase in access speed from the ROMdisk. For instance the CP/M 3.0 system takes just 7.5 seconds to load from a 3.5" diskette against just under 2.5 seconds from the ROMdisk. The Cirtech CP/M version 3.0 system is very easy to setup and you don't have to worry about the presence of the RAMdisk because CP/M version 3.0 rec-

ognises all the smartport devices that are connected. Wordstar and Turbo Pascal work fast and efficiently from the ROMdisk.

You may 'write-protect' the ROMdisk by choosing an option on the diskette supplied with your plusRAM-GS2 or plusRAM-GS8 card or by altering a byte of the ROMdisk driver from the monitor. For instance from Applesoft prompt ] type:-

```
]CALL -151
```

The monitor \* will appear so then type the following :-

```
*P0/000C:0 - WRITE ENABLE
*P0/000C:1 - WRITE PROTECT
```

This write-protection is useful if you want to prevent files from being accidentally erased from your ROMdisk or access through the smartport. It won't prevent certain forms of program crashes or bugs from writing or corrupting your ROMdisk. Let's put this in perspective though. I never bothered to write-protect the ROMdisk and suffered not one single problem over 5 months of use. During that time my machine 'went-down' at least twice necessitating a power-on because some part of main memory was corrupted. I tried hard to create conditions that might corrupt the ROMdisk by running buggy programs but no problem ever occurred!

Cirtech claim that the PROMDISK adaptor has a battery that will keep 256K bytes of memory on the CMOS chips refreshed for in excess of one month. Naturally, as I only have one Apple IIGs computer I could not leave it off for that long. I did, however, manage 7 days somehow! On switching on AppleWorks was up and running in 3 seconds. I contacted Cirtech regarding this and was informed that the 256K card would almost certainly retain its contents for well over the month claimed due to the very low power consumption of the CMOS chips used.

## CONCLUSION:

Cirtech have almost certainly produced a winner with this card who would wait at least 30 seconds for AppleWorks to load when it can be up and running from the PROMDISK adaptor in 3 seconds from switching on the machine.



# MacLine

WREN HOUSE  
SUTTON COURT RD  
SUTTON, SURREY  
SM1 4TL, U.K.

**A FREE HYPERSTACKS DISC FOR KIDS WITH EVERY ORDER**



**101  
Macros  
for  
Excel**

**£39.00**

Including a comprehensive manual and tutorial, this program will speed your use of Excel by eliminating mundane and repetitive tasks, key and mousestrokes.

## UTILITIES & DA's

<b>Affinity Microsystem</b>	£
Tempo (macro DA with conditional branching)	59.
<b>Alsoft</b>	
Disk Express (maximise disk speed)	29.
Font/DA Juggler + (multiple DA's, FKeys)	39.
<b>Berkeley System Design</b>	
Stepping Out (Virtual Screen extender)	58.
<b>CE Software</b>	
DiskTop 3.0 (DA Finder with Laserstatus)	33.
QuickKeys (assign keys to mouse moves)	69.
<b>Central Point Software</b>	
Copy II Mac (backup protected software)	22.
<b>Dubl-Click Software</b>	
Calculator Constructor (well...)	39.
<b>Electronic Arts</b>	
Disk ToolsPlus (best DA bundle yet)	25.
<b>Greene, Inc</b>	
QuickDex (brilliant rolodex DA database)	37.
<b>Imagine</b>	
Smart Alarms (DA reminder system)	38.
<b>Olduvai Software</b>	
Icon It (assigns icons to menus, DAs)	43.
<b>Supermac Software</b>	
Sentinel (hides data from prying eyes)	45.
DiskFit (backup HD with "smart floppies")	45.
SuperSpool (the quickest spooler...)	45.
SuperLazerSpool (... for lasers as well)	95.
<b>Softstyle Inc</b>	
Epstart (run a Mac with an Epsonserial printer)	29.
<b>Software Supply</b>	
Suitcase (unlimited DAs and Fonts)	38.
PowerStation (launches applications DAs)	39.
<b>Solutions Inc.</b>	
Smartscrap & the Clipper (indispensable)	39.

## WORD PROCESSING

<b>Batteries Inc</b>	
Thunder (50000 word DA Spelling Checker)	35.
<b>Bonadio Associates</b>	
Expressionist (DA equation processor)	52.
<b>Living Videotext</b>	
More (powerful outline processor)	165.
<b>Microsoft</b>	
Word 3.01 (heavy duty Word Processor)	209.
<b>Microlytics</b>	
Wordfinder (excellent Thesaurus DA)	44.
<b>Symmetry</b>	
Acta (outline/writing Desk Accessory)	48.
<b>TMaker</b>	
Write Now (highly rated, built-in spellcheck)	119.

## PAINT & DRAW

<b>Adobe</b>	
Illustrator (ultimate Postscript graphics tool)	369.
<b>Ann Arbor</b>	
FullPaint (4 documents at once, full text fx)	58.
<b>Great Wave</b>	
Crystal Paint (symmetrical paint patterns)	39.
<b>Deneba</b>	
Canvas (paint/draw on same file, bezier curves)	139.
<b>Enabling Technologies</b>	
Easy 3D (create, sculpt solid 3D objects)	75.
<b>Enzan-Hoshigumi</b>	
MacCalligraphy (Japanese painting)	115.
<b>Foundation Publishing</b>	
Comic People (office days clip art)	35.
Comic Strip Factory (create your own comics)	55.
<b>Innovative Data Design</b>	
MacDraft (highly advanced, object oriented)	174.
<b>MacroMind</b>	
VideoWorks II (animation program)	139.

### Crystal Paint



**£39.00**

Innovative graphics program using symmetry and repetition for intricate and beautiful kaleidoscopic patterns and tessellations.

## CLIP ART

<b>Dubl-Click</b>	
WetPaint Bundle (great Clip Art)	39.
<b>Simon and Schuster</b>	
Mac Art Department (over 150 images)	26.
<b>Olduvai</b>	
Post Art (Cricket MacDraw, Illustrator clip art)	39.
<b>Symmetry</b>	
Picturebase 1.2 (Clip Art Database)	58.

## DTP

<b>Adobe</b>	
Fonts (The full range at discount prices)	call
<b>Altsys</b>	
Fontastic Plus (advanced Fonts Editor)	44.
Fontographer (create Postscript Laser Fonts)	245.
<b>Casady Ware</b>	
Fluent Fonts (2 disks of good Imagewriter fonts)	32.
<b>CE Software</b>	
Calendar Maker 3.0 (customise a Calendar)	26.
<b>Dubl-Click</b>	
World Class Fonts (2 volume Imagewriter fonts)	39.
<b>Letraset</b>	
Ready, Set, Go! 4 (powerful, friendly DTP)	425.
<b>Postcraft International</b>	
Laser FX (Postscript Fonts modifications)	149.
<b>Solutions Inc</b>	
SuperGlue (essential DTP tool)	59.
The Curator (direct access to any artwork)	85.

## PROGRAMMING

<b>Borland International</b>	
Turbo Pascal (Borland's bonus Compiler)	59.
Turbo Pascal Tutor (teaches Mac Pascal)	46.
Turbo Pascal Numerical Methods	59.
TurboPascal Database Toolbox	59.
<b>ICOM Simulations</b>	
TMON (best Macintosh debugger by far)	98.
<b>Lightspeed</b>	
C (probably the best language)	119.
Pascal (highly rated implementation)	119.
<b>Mainstay</b>	
VIP (programmable Flow Charts)	105.

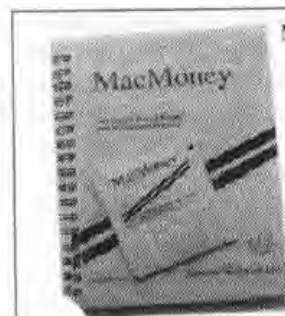
## BUSINESS

<b>Ashton-Tate</b>	
dBase Mac (finally available for the Mac)	325.
<b>Borland International</b>	
Reflex Plus (new Relational Database)	179.
<b>Bravo Technologies</b>	
MacCalc (full featured, fast Spreadsheet)	89.
<b>Forethought</b>	
Filemaker Plus (feature packed Database)	159.
<b>MacroPac</b>	
101 Macros for Excel (keys/time saver)	39.
<b>Microsoft</b>	
Excel 1.04 (the power Spreadsheet)	199.
Works 1.0 (5 well integrated programs)	189.
<b>Monogram</b>	
Dollars & Sense (home and small business)	99.
Business Sense (integrated accounting)	299.
<b>North Edge</b>	
Timeslips III (time, bills and expenses)	149.
<b>Odesta</b>	
Double Helix II (extremely powerful database)	415.
<b>Software Ventures</b>	
Microphone (high powered comms)	129.
<b>Survivor Software</b>	
MacMoney 3 (complete home Accounts, reports)	75.

## HYPERSTACKS

<b>Activision</b>	
Focal Point (Hypercard organiser)	69.
Business Class (worldwide travel data)	39.

New stacks are becoming available regularly.  
Please call if this is your interest.



**MacMoney 3**


**£75.00**

The best reasonably priced home and small business accounts package available. Does reports and graphs and exports data to word proc's etc. Winner of the US MacUser Best New Personal Finance Program Award.



# 01-642 4242

OUR CATALOGUE IS AVAILABLE ON MACTEL. CALL 01-381 4323



**Focal Point**

**£69.00**

The ultimate organiser using the Hypercard environment and linking your information in a unique dynamic fashion. Easily customised to suit your own individual requirements.

## MUSIC & EDUCATION

<b>Bogas</b>	
Studio Session (Editor & Player, 6 voices)	79.
<b>Great Wave Software</b>	
Concertware + (8 instrument Composer)	39.
Concertware + MIDI (many new features)	99.
<b>Addison-Wesley</b>	
Puppy Love (programmable puppy)	23.
<b>Great Wave Software</b>	
Kids Time (5 quality progs for ages 3-10)	29.
<b>Simon &amp; Schuster</b>	
Typing Tutor IV (the best, with letter invaders)	39.
<b>Systec</b>	
Word Quest (for reading & spelling difficulties)	45.

## GAMES

<b>Activision</b>	
Shanghai (ancient Chinese game of Mah Jong)	29.
Tass Times (adventure with a sense of humour)	26.
<b>Broderbund</b>	
Ancient Art of War (addictive strategy game)	29.
<b>Bullseye Software</b>	
Ferrari Grand Prix (4 courses + designer)	34.
Fokker Triplane (most responsive simulator)	34.
<b>Epyx</b>	
Sub Battle (become a WWII skipper)	29.
Winter Olympics (up to 8 players)	29.
<b>Infinity</b>	
Go (excellent implementation of ancient game)	28.
<b>Microsoft</b>	
Flight Simulator (highly realistic Cessna/Jet)	31.
<b>Electronic Arts</b>	
Chess Master 2000 (undoubtedly the best)	29.
Seven Cities of Gold (educational adventure)	29.
Patton vs. Rommel (revisit Normandy in '44)	29.
Pinball (4 tables plus construction set)	22.
<b>Infocom</b>	
Hitchhikers Guide (Douglas Adams's classic)	22.
Leather Goddesses (raunchy adventure)	25.
<b>Practical Computer</b>	
MacGolf (superb playability, many courses)	38.
<b>Simon &amp; Schuster</b>	
Star Trek (Klingons on the starboard bow)	28.

### Policy

- \*Credit cards will not be charged until the order is shipped.
- \*If a partial order is despatched, the balance is posted free of additional postage charges.
- \*All Goods are sent by Insured Registered First Class Mail.
- \*Courier services are available.
- \*Defective software is replaced immediately.
- \*Refunds will only be given on unopened packages that are returned within 7 days of receipt.
- \*Prices are correct at time of going to press.

VAT No.452 3149 66

## MATHS & STATS

<b>Brainpower</b>	
StatView 512+ (accurate, intuitive)	189.
Math View Professional (numeric analysis)	189.
<b>Borland International</b>	
Eureka (equation solver, Graph generator)	115.

## MEMORY UPGRADES

2 x 1Mb SIMMS	call
1Mb to 2.5 MB memory upgrade on MacPlus and SE. 2MB on Mac II	

## SOFTWARE

### SPECIAL OFFER

#### Font DA Juggler Plus

#### The Suitcase Killer!

Immediate access to hundreds of DA's, fonts, sounds and FKeys simultaneously and 50 public domains are included together with 3 utilities. 100% MultiFinder and Mac II compatible.

**£33.00**

offer ends 30th April 88

## BOOKS

Complete guide to Omnis 3	20.
Mastering Omnis 3	13.
Complete HyperCard Handbook	27.
Excel Advanced Users Guide	17.
Mastering Excel	22.
Using Excel	18.
Excel Macro Library	18.
Inside Macintosh Vol 1	23.
Inside Macintosh Vol 2	23.
Inside Macintosh Vol 3	19.
Inside Macintosh Vol 4	23.
Macintosh Adviser	16.
Microsoft Word Made Easy	16.
Personal Publishing PageMaker	17.

Our new Spring catalogue is now available. It contains our full range of hundreds of Macintosh hardware and software products, many of which are not included in this ad. Call for a free copy.



## SCANNING


<b>Thunderware Inc.</b>	
ThunderScan	189.
Scanning for one tenth of the usual price!	
Compatible with 512K, MacPlus and Mac SE.	
Requires ImageWriter.	
Superb value from a proven product.	
<b>Version 4 software</b>	27.
Owners of the old software can now upgrade to the new, improved and faster version 4 software.	
<b>Power Ports</b>	34.
Upgrade your old ThunderScan to work on Macs with SCSI ports	
<b>Olduvai</b>	
Read-It TS	95.
OCR software optimised for ThunderScan	
Read-It	229.
OCR software for most scanners.	

## HARD DRIVES

<b>Qisk</b>	
MiniQisk 20Mb Hard Drive	389.
20Mb	449.
45Mb	610.
60Mb	775.
New technology drives are up to 30% faster than before.	
<b>Rodime</b>	
45Mb	615.
60Mb	695.
100Mb	950.
140Mb	1075.

Excellent British made under the Mac style drives.

PLEASE ADD £7.00. DRIVES ARE SENT SECURICOR.



**Sub Battle**

**£29.00**

The best simulator available; skipper a US navy sub or a U-Boat during WWII on one of sixty different missions based on actual historical scenarios.

## MISCELLANEOUS


<b>MacMemory</b>	
Turbo SE (speed an SE up to a Mac II)	470.
<b>Mouse Systems</b>	
MacPlus Mouse (Intra Red mice 2 yr guarantee)	
Mac SE & II Mouse (never need cleaning)	89.
<b>Dove</b>	
Toolkit (to open up your Mac)	15.

### Ordering

- \*To order call Monday - Friday, 9.30 to 5.30.
- \*Add £2.50 to cover P & P and then add VAT.
- \*Please add £7.00 on orders over £100 for Securicor.
- \*Payment is by credit card, cheque or money order.
- \*Government departments, Educational, and PLC companies are welcome to purchase with an order.
- \*For international orders please exclude VAT.
- \*International postage rates are £6.00 for Europe and £8.00 for the rest of the world.

## Merlin 8/16

**Dave Ward examines  
this Assembler package  
for the 8 and 16 bit  
Apple // processors.**

 Almost all Apple // computer users will have heard of the Merlin Assembler which has been around almost as long as the Apple // computer itself. Over the years the product has been steadily improved until this latest version for 128K byte Apple //e and later computers.

The Merlin 8/16 system package comprises a 220 page manual, two 5.25" diskettes and a 3.5" diskette. An eight page addendum to the manual and an errata were also supplied with my system. One 5.25" diskette contains the Dos 3.3 version of Merlin 8 whilst the other 5.25" diskette contains the ProDOS version of Merlin 8. On the other side of this diskette are a set of files which can be used to produce a fully commented disassembly of the Applesoft ROM in your machine. The 3.5" diskette contains the Merlin 16 program and utilities.

All three diskettes are copyable; that's good. Copy protection only serves to annoy genuine users and possibly provides an ego boost to the author and those who very soon 'break' the copy protection scheme. First of all you would be advised to make back-up copies of those diskettes that you will be using and store the originals in a safe place. Use the copies that you have just made to make working-copies that you use regularly.

```
MERLIN-16 3.41
Copyright 1987 by Glen Bredon
19-DEC-87 20:12
```

```
C :Catalog
L :Load source
S :Save source
A :Append file
D :Disk command
F :Full screen editor
O :Save object code
@ :Set date
Q :Quit
Source: A$0901,L$0000
Prefix: /MERLIN.16/
```

When you boot-up the 3.5" diskette on an Apple IIGS you will quite soon be presented with the following menu. On the way you will have noticed that the system runs under ProDOS 8 version 1.3B. The 'B' indicates that this version of ProDOS has been patched by Glen Bredon to make quitting ProDOS pleasant. Even users of the oldest versions will instantly recognise the familiar MERLIN main-menu.

Just press the key of your choice at the % prompt.

C gives a catalog of the current Prefix under ProDOS and the current drive under DOS3.3 - opposite is a listing of the MERLIN.16 master diskette.

D This command under DOS3.3 just toggles the drive between 1 & 2. Under ProDOS, however, it allows you to give disk commands such as RENAMEing, LOCKing/UNLOCKing, DELETEing, BRUNning, BLOADing and BSAVEing files. You can change the PREFIX and take a look at the ONLINE volumes. I wondered what had happened to CREATE since the CREATEion of directory files is required from time to time.

Loading, Saving and Appending source files (text files) is accomplished using the commands L, S & A. These files, on disk, have the characters .S appended at the end of the file name to label them as source files. You just enter the filename less this .S. When you save a source file and specify a directory that does not exist, that directory is created! Personally I prefer to be able to CREATE directories and have an error if I try to save a file to a non-existent directory. So that's why CREATE is omitted!

Pressing F from the main menu takes you into the MERLIN 16 Fullscreen editor (actually pressing E has the same effect). Entering the Fullscreen editor on the first occasion is just a little daunting as you are presented with an almost blank screen with a number 1 in the top right-hand



/MERLIN.16/

Name	Type	Blocks	Modified	Created	Length	Subtype
PRODOS	SYS	32	8-NOV-87 18:25	8-NOV-87 18:25	14848	
MERLIN.SYSTEM	SYS	45	8-NOV-87 18:25	8-NOV-87 18:25	\$5700	\$0000
PARMS	BIN	1	9-DEC-87 21:25	8-NOV-87 18:25	\$82	A=\$8000
LINKER	BIN	8	8-NOV-87 18:25	8-NOV-87 18:25	\$DD8	A=\$8000
LINKER.GS	BIN	10	8-NOV-87 18:25	8-NOV-87 18:25	\$1100	A=\$8000
LINKER.XL	BIN	10	8-NOV-87 18:25	8-NOV-87 18:25	\$1700	A=\$8000
SOURCEROR	DIR	1	8-NOV-87 18:25	8-NOV-87 18:25	\$200	\$0000
UTILITIES	DIR	2	8-NOV-87 18:27	8-NOV-87 18:25	\$400	\$0000
SOURCE	DIR	1	8-NOV-87 18:27	8-NOV-87 18:25	\$200	\$0000
LINKER.DEMOS	DIR	2	10-NOV-87 15:39	8-NOV-87 18:25	\$400	\$0118
LINKER.8.DEMO	DIR	1	8-NOV-87 18:25	8-NOV-87 18:25	\$200	\$0000
LINKER.GS.DEMO	DIR	1	8-NOV-87 18:25	8-NOV-87 18:25	\$200	\$0000
PUT.FILES	DIR	1	8-NOV-87 18:25	8-NOV-87 18:25	\$200	\$0000
GEN.MACROS	DIR	1	8-NOV-87 18:25	8-NOV-87 18:25	\$200	\$0000
TOOL.MACROS	DIR	3	8-NOV-87 18:25	8-NOV-87 18:25	\$600	\$0000
TOOL.EQUATES	DIR	2	8-NOV-87 18:25	8-NOV-87 18:25	\$400	\$2000
CDA.EXAMPLES	DIR	2	10-NOV-87 15:25	8-NOV-87 18:25	\$400	\$0000
MISC.EXAMPLES	DIR	2	8-NOV-87 18:25	8-NOV-87 18:25	\$400	\$0000
SAMPLES.APW	DIR	1	8-NOV-87 18:25	8-NOV-87 18:25	\$200	\$0000
SAMPLES.M16	DIR	1	8-NOV-87 18:25	8-NOV-87 18:25	\$200	\$0000
BASIC.SYSTEM	SYS	21	8-NOV-87 18:25	8-NOV-87 18:25	\$2800	\$2000
BLOCKS FREE:	436	BLOCKS USED:	1164	TOTAL BLOCKS:	1600	

## Catalog listing

corner which informs you of the relative line within the file where the cursor resides. The cursor is represented by an inverse I which is in the top left-hand corner (home). The inverse I indicates that the editor is in insert mode; this can be changed to overstrike. You will also see a vertical line at the top right of the screen. This defines the point at which text on the screen will reach the end of a printed page. The position of this line may also be changed; it isn't present on my screen because I have specified the printer to have 136 columns. The Fullscreen editor has all the usual features that you will find in a top quality word processor such as inserting, deleting and moving blocks of text about, searching and replacing text, printing text etc. etc. In fact the MERLIN Fullscreen editor could be used as a word processor but it is setup to facilitate the entry of MERLIN source text which is not free-form. Like most 6502 assemblers the MERLIN source text must be entered in four columns although not all have to be used. These four columns are as follows:-

### LABEL OPCODE OPERAND COMMENT

**Comments** - This column should begin with a ;. Using a ; is good practice but is not usually necessary. Entering a ; from the beginning of any other column tabs the cursor to the start of the comment column which saves time and keystrokes. Comments at the end of each line of code can be

very useful, particularly when you need to service the code at a later date. MERLIN allows you to produce comments starting at the second character of the line if the first character is an asterisk \*. This is very useful as it allows 'banners' to be placed at the start of a routine to describe its operation. MERLIN has four commands to help with the production of banners :-

```
*****
- (open-apple 8)
*
- (open-apple 9)
*
- (open-apple -)
*-----
- (open-apple =)
```

Merlin supports basically three types of OPCODE :-

- 1 The full 65816 instruction set of OPCODES.
- 2 Pseudo-OPCODES which Merlin interprets as commands. A few examples are :-  
**PAG** - causes a formfeed during printing.  
**LST** - controls listing to the output device during assembly.  
**USE** - tells Merlin to USE a file of, usually, MACRO definitions.
- 3 MACROS are OPCODES that you the user define. They may be defined within the program or in a special file which is made known to Merlin

by the USE pseudo OPCODE. Basically MACROS are multiple lines of code that are used often and condensed to a single line in the main program which saves clutter in listings. With MACROS you can, almost, make your own programming language.

Merlin 8/16 strongly supports MACROS and files of ready-made MACROS are supplied. Merlin allows you to produce some of the most sophisticated MACRO definitions; you can use conditional assembly such as IF-THEN-ELSE.

Lets look at a 65816 MACRO definition to push a long word (4 bytes) onto the stack :-

```
PushLong MAC;Define MACRO PushLong
IF #,11 ;Immediate value ?
PEA ^11 ;Yes,push high word
PEA 11 ;push low word
ELSE ;Otherwise,
LDA 11+2 ;Get high word
contents
PHA ;Push it onto the
stack
LDA 11 ;Get low word contents
PHA ;Push it onto the
stack
FIN ;End of conditional
section
EOM ;End of MACRO defini
tion-very important!!
```

All this code could be condensed into a single line in your listing :-

```
LABEL OPCODE OPERAND COMMENT
PushLong $0000 ;Create space for
the result of call
```

When writing programs for the Apple IIgs listings can become very long as many calls will be made to the toolbox. MACROS make these calls take up considerably less space and so make listings manageable. Of course, the same amount of code is still generated!

If you are writing ProDOS 16 applications you will be required to assemble them using the REL opcode and then subsequently LINK the resulting file(s) to produce a file of the type S16 which can be launched by the ProDOS 16 launcher.

All versions of MERLIN are very fast at linking and as-

Merlin version	Processor speed	length of source	time to assemble
MERLIN 16	Fast	873 lines	4.2 = 12,000 lines/sec
MERLIN 8	Fast	873 lines	5.6 = 9,000 lines/sec
MERLIN 8	Slow	873 lines	13.0 = 4,000 lines/sec

## Assembly speed

sembling and I have constructed a little table to show above.

Both MERLIN 8 and MERLIN 16 allow one to create RELocatable OBJECT files that can be linked; one or many files can be linked together to produce a final executable object file. Note that when you assemble a RELocatable file a filetype LNK is produced. The linking capabilities of MERLIN 16 far surpass that of MERLIN 8; MERLIN 16 supports 3 linkers. Object code files for Merlin 16 (S16 - filetype) must be relocatable otherwise they cannot be loaded by the ProDOS 16 launcher.

1. LINKER for MERLIN 8 source files.
2. LINKER.GS for normal-sized MERLIN 16 source files.
3. LINKER.XL for very large MERLIN 16 source files.

There are many demonstration files to allow the user to get acquainted with the procedure. Unfortunately one of the better demonstration files that can be assembled and linked into the program to calculate PI need a little editing to work properly on the MERLIN.8 diskette. First use a copy of the diskette MERLIN.8 to carry out your work. The problem arises because some of the files expect a volume name of /MERLIN whilst others require /MERLIN.8. Probably the simplest way to make the linking process work is to change the volume name to MERLIN. From the main menu choose option D and then type, at the : prompt - RENAME /MERLIN.8/MERLIN Next you will require to load the file /MERLIN/SOURCE/PI.NAMES - by choosing option L from the main menu and then entering the above name. When the file is loaded you will find yourself in the command mode of the Editor. At the :

prompt just type CH"/MERLIN.8"/MERLIN" and when requested type A for All. Next type ASM to assemble the file and then go back to the main menu and save the source file. Finally choose E to go back to the command mode of the Editor and then type NEW to clear the edit buffer - very important - and then type LINK \$803 "/MERLIN/PI/NAMES" and within a few seconds the files will be linked and saved as an executable object file. To run go back to the main menu and choose option D and then type BRUN /MERLIN/PI/OBJ and follow the prompts. This, in my opinion, is an unfortunate nuisance that should have been tidied up by the publishers before offering the product for sale.

All versions of MERLIN can be configured by editing a file on the disk PRAMS and then assembling it back to disk. Since users of MERLIN 8/16 are programmers this is quite a good way of configuring the program. However, it's not a bad idea to use a copy just in case. Some of the PARAMS you can adjust are as follows :-

1. Printer configuration and paper dimensions etc.
2. Tabbing configuration to allow longer labels to be used without producing messy listings.
3. Startup mode 65816, 65C02 or 6502. This can be important if, for instance, you want to write 6502 code on a machine that has a 65C02 or 65802 or 65816. You can specify that Merlin 8/16 only accepts 6502 OPCODES and flags any others as errors during assembly.
4. Case sensitivity of labels - some assemblers assume a = A - MERLIN normally doesn't.
5. You can alter some of the keys used by the editor to customise it.
- 6] It is possible to make MERLIN

blank the screen if it is left on but unattended!

The MERLIN 8/16 package contains many utilities which have over the years formed a formidable array. Let's look at a few of them :-

## PRINTFILER

This utility simply sends a listing to the printer to a disk file instead. This makes it possible to include listings into word processor documents without having the tedium of typing it in.

## XREF and XREFA

These are very useful utilities which produce two tables, one ordered numerically the other ordered alphabetically to list all the labels + addresses and the lines in the source code in which they appear.

## SOURCEROR

This is a clever name for MERLIN'S assistant which produces source code from a binary code file - that is SOURCEROR is a disassembler. There is the world of difference between a source code file and the binary code which it produces; this utility makes it very much easier for a programmer to examine any 65816, 65802, 65C02 and 6502 code. There is a version of SOURCEROR on the MERLIN 16 diskette and versions of SOURCEROR on both ProDOS and Dos3.3 MERLIN 8 diskettes. Operation of all three versions is well described over a few pages of the manual.

SOURCEROR is extremely easy to use and it is possible to disassemble 1000 bytes of code in just a few minutes. Sourceror is so fast that it is best to do a quick disassembly making notes as you go along and then do the disassembly again to get it just right! Sourceror has a file named LABELS which it uses to replace hexadecimal numbers by a name. For instance it could replace \$FC58 with HOME - which would you prefer! You can make your own label definitions, which can be added to the labels file.

## MACGEN

Many of the MACRO definitions that you use regularly will be stored in files on the diskette. It is, of course, possible to reference all such files of MACROS with the USE op-



# Apple //

code but this could lead to memory being wasted and hence problems with large source code files. MERLIN has a utility called MACGEN which allows you to write a source file with many MACRO definitions. When you run MACGEN it records all the MACRO references in your source file that are not defined and then requests you to enter a directory that you wish it to search for the definitions. MACGEN then produces a source file containing just those definitions which you may save and then USE in your main source file.

## CONVERTER

Since APW assembler (Byteworks) is the assembler supported by Apple Computer Inc. it is highly likely that at some time you will require to use source files produced by that assembler for MERLIN 16. Although the APW (Byteworks) assembler has probably more features than any other assembler, including MERLIN, it uses very complicated opcodes and in my opinion, is not too easy to use particularly for beginners. CONVERTER is an Applesoft BASIC program that takes most of the donkey work of converting APW files for you. You may, however, still require some editing to finish the job. A demonstration file that has been converted is hidden in a directory!

## TYPE.CHANGER

This is simply an Applesoft BASIC program that changes the file type. For instance if you have a BINary file you could change it to a SYStem file using this utility. Since the conversion is carried out on

Pi to so many places the main reason for its inclusion is to provide a demonstration of the LINKER. The program is divided into 5 sub-programs which are assembled and then linked into a single binary file and can simply be BRUN from Dos3.3 or ProDOS. For those interested I used the program to calculate Pi to 10,000 decimals on the Apple IIgs and here is a little table showing some results by other computers over the last 40 years:-

The current record is held by a Japanese Super-computer which computed Pi to 133 million places in around 8 hours! The calculation of Pi can be useful as a check that a computer is performing correctly.

The back-side of the Merlin 8 ProDOS diskette contains a special form of Sourceror that allows one to produce a commented listing of the Applesoft interpreter in the ROM of your computer. It is best to use a copy of this diskette as certain files are erased during the procedure. This listing is invaluable to anybody wishing to write machine-code that can be interfaced with their Applesoft programs, or for those who wish to know the internal workings of Applesoft. Considering the time that Applesoft has been around it is surprising that so few bugs have appeared. The Applesoft listing points out most of them, if you are interested!

Merlin 8/16 is available from MGA Microsystems for \$129.95 inc. VAT. If you wish to take up the upgrade discount, however, you will have to purchase directly from Roger Wagner Publishing Inc. When I upgraded my old 48K Dos 3.3

tionally purchase a diskette to save keying in those programs. I chose not to purchase that diskette - in hindsight I consider that a mistake! MGA Microsystems will be stocking both the aforementioned book and diskette for \$19.95 (no VAT) and \$15.95 + VAT respectively.

Roger Wagner Publishing also supply a 65802 chip that can replace the 6502 or 65C02 chip in an Apple //c computer which will let you use Merlin 16 on that computer. They advertise the cost as \$25.00. This, presumably, is one reason why the system is still ProDOS 8 based. The other, in my opinion, is that it boots up in a reasonable time!

Merlin 8/16 is an excellent environment for producing assembler programs for all Apple // computers. All aspects of the system are simple to understand and use. The full-screen editor is a pleasure to use even though it doesn't use the same screen commands as AppleWorks. (Surely by now AppleWorks screen commands should be the standard.) The system appears bug-free and the editor is remarkably resistant - I could find no way to cause it to 'bomb' - this is important because you wouldn't want to lose all that text, would you? The manual is well written and easy to follow and almost free of mistakes.

Of all the Apple // assemblers that I have used Merlin has got to be the fastest, cleanest and easiest to use. If you are thinking of buying an assembler take a look at Merlin first.

## info

Program: **Merlin 8/16**  
Author: **Professor Glen E Bredon**  
Manual: **Roger Wagner & Tom Burns**  
Price: **\$125.00**  
Publisher: **Roger Wagner Publishing Inc.**  
**1050 Pioneer Way**  
**Suite P**  
**El Cajon**  
**CA 92020**  
Available  
From: **MGA Microsystems**



Author	Machine	Year	Places	Time (mins)
Reitwiesner	ENIAC	1949	2,037	4,200
Felton	Pegasus	1958	10,000	1,980
Genuys	IBM 704	1958	10,000	100
Shanks & Wrench	IBM 7090	1961	100,265	523
Glen E Bredon	Apple IIgs	1986	10,000	127

the file and catalog entry itself it might be a good idea to use a copy.

## APPLE PI

This is a utility to calculate Pi up to 11516 decimals. Although it is nice to see

version of Merlin I also purchased the book, written by Roger Wagner, 'Apple IIgs Machine Language for Beginners' at the same time. We will be reviewing that book soon. The book contains quite a lot of demonstration programs and you can op-

## Mac2000



---

**Topics of interest to Macintosh owners:- MacRecorder, Citadel, Casino Classics, Printer Interface II and a book on HyperTalk.**

---



### MacRecorder

The MacRecorder Sound System allows Macintosh users to record real sound directly into the Macintosh computer. When used with a built-in microphone or an external microphone, any sound source (including television or stereo) can be accessed to make recordings. The MacRecorder System is compact and easy to use and is comprised of the MacRecorder sound digitizer, a HyperCard™ application called Hyper Sound™, and SoundEdit™ which is sophisticated editing software.

The possible applications for the MacRecorder are endless and it can be used to enhance HyperCard stacks with a variety of sounds and where applicable, narration can be added to demos, educational and training programs, using your own voice.

Macintosh II owners can even record in stereo by plugging a MacRecorder into each of the serial ports. Sound can then be played back in stereo on a Macintosh II computer or in mono on a Macintosh SE, Mac Plus or earlier models.

MacRecorder appears suitable for use with HyperCard. Using HyperSound, a utility that accompanies MacRecorder, sound can be recorded from within a HyperCard stack. HyperSound uses a familiar "digital cassette tape graphic" interface to guide users through the application allowing for easy access to sound files. Sound can be recorded, stored and played back using four sampling rates. The more frequent the rate of sampling, the higher the sound quality reproduced. Another feature of HyperSound is its "Copy Sound to Stack" button. With this button any sound can be automatically pasted into any other stack. It can be saved and then retrieved when the stack is opened.

SoundEdit is a stand-alone application

included with MacRecorder that allows Macintosh users to record, edit, play and save sounds into a variety of standard sound formats including:- HyperCard™, Studio Session™, VideoWorks™ and Beep INITS. In addition, it can control sampling rates and provides 8 to 1 sound compression. With SoundEdit's special effects, you can create sounds in loops, mix any sounds together, and use the filter like a graphic equalizer.

Farallon Computing Inc. a Berkeley, CA based corporation, intend to announce several new applications for their MacRecorder during the next year. For additional information contact Farallon Computing at (415) 849.2331.

### Citadel

A world of knights, thieves, wizards and warlocks awaits gamers with the will to unravel the secrets lurking within the mysterious catacombs of Citadel, new software for the Macintosh. Set in an imaginary time and place, Citadel challenges the fussiest fantasy role players with a do-it-yourself scenario and a complex and absorbing storyline.

Following in the tradition of Wizardry™, Citadel allows anyone with a Macintosh to quest in an unknown world and to vanquish dragons, serpents and other foes. Three dimensional graphics and digitized sound enhance the experience, as players traverse the subterranean stone maze in search of the secret it holds.

In Citadel, players create their characters from attributes they select from the game's six menus. Players determine their characters' background, including elements like lineage, gender, race and social class. Through the combination of these attributes, characters are "born." Players can create and store up to eighteen characters for each adventure, using as many as six of them during a quest.



# Macintosh

Citadel gives you the ability to create characters in depth from birth to campaign; draw original characters, objects and scenery or use pre-drawn icons; develop character traits through continued interaction; move through on-screen tunnels, viewing them head-on in 3-D; play with several open windows at a time. More information can be obtained from Mindscape, Inc., 3444 Dundee Road, Northbrook, IL 60062, Tel:- 312/480-7667.

## Casino Classics™

The original casino games for the Macintosh, Mac-Jack™, Mac-Poker™ and Mac-Slots™ have now been put together and are being offered in one complete package. The disk now gives a choice of Black-jack, Poker, Slots or Keno and the USA price is

\$39.95 from DataPak Software, Inc, 14011 Ventura Boulevard, Suite 507, Sherman Oaks, California 91423.

## Printer Interface II

Would you like your Macintosh to print to non-Apple printers? If so then Printer Interface II may be what you are looking for. Printer Interface II is advertised as being compatible with all System software, including the very latest System and Finder.

No special hardware is required for the operation of Printer Interface II other than the correctly wired cable; it is 100% software based. It is also advertised as driving any serial printer from a Macintosh.

Printer Interface II works with all the Macintosh models and with any standard application which allows printing from 'draft' mode. Installation is easy and requires no special procedure once installed as the desk accessory 'Chooser' can be used to select your printer.

DataPak Software say that the Printer

Interface II is ideal for text printing to 'daisy-wheel' and dot-matrix printers. The USA price is \$95.00 and more information can be obtained from DataPak Software, Inc, 14011 Ventura Boulevard, Suite 507, Sherman Oaks, California 91423.

## Price Increase

Greene Inc. of Monterey, California have announced a price increase for their free-form database desk accessory program, QuickDEX, for the Macintosh. The

which sits inside the back cover of the book.

The book has twenty-six chapters and three appendices. The early chapters cover background material about HyperTalk and the HyperCard environment. Next come chapters on HyperCard design, and essential, practical information about HyperTalk programming, such as how to use the script editor and HyperTalk naming conventions.

Serious exploration of the operation of the HyperTalk programming language

comes next, and the following topics are covered intensively:-

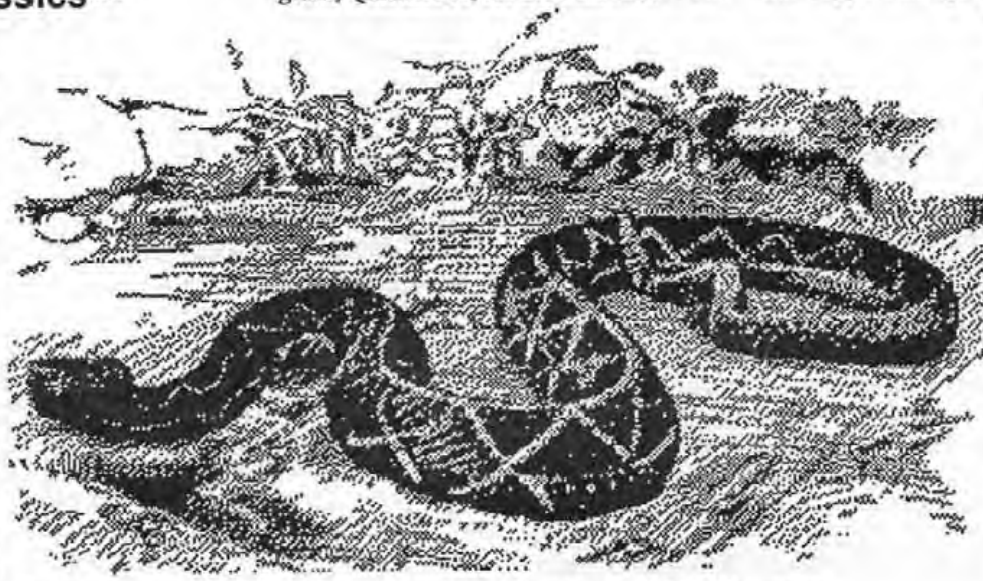
- system messages
- keyboard, mouse and file I/O operations
- control structures and logical operators
- controlling stack flow, card flow, and interaction
- text and data management rou-

lines  
• dialog boxes and their use in HyperTalk  
• menu management  
• the use of visual and graphic effects  
• sound and music  
• maths within HyperTalk  
• action-taking commands  
• property-related commands  
• communications commands  
• script and other related commands  
More advanced topics follow, including practical advice from experienced HyperTalk programmers, how to extend the power of HyperCard and HyperTalk itself, how to design stacks for the maximum effect, and a survey of useful free and shareware programming tools.  
Two substantial scripts are included so that the reader can examine them, take them apart, modify them and learn from them. An address is given from which a disk of the programs is available for those not wishing to type them in.  
HyperTalk Programming costs £ 18.95 from bookshops.

new suggested retail price of \$60.00 (USA), came into effect at the end of February. Greene Inc. have laid the blame for the price increase on increased marketing, research and development costs. Greene Inc. are currently looking for new products to publish from skilled developers who are willing to share some of the risks and profits in getting new products to the marketplace. They feel that many single product developers in the USA are finding it increasingly difficult to find distributors and dealers willing to carry their products. This is a far cry from a few years ago when dealers and distributors were begging for Macintosh software with sometimes little regard for quality.

## HyperTalk Programming

A very useful new book is now available for HyperCard programmers. The title is 'HyperTalk Programming' by Dan Shafer and it is part of Hayden Books Macintosh Library Series. An added bonus for purchasers is a HyperTalk Language Poster



# AlphaPop

by Bill Pearce



AlphaPop belongs to the Lisp family of computer languages. Of this group, Logo is perhaps the best known 'dialect' and Turtle Graphics certainly the best known feature. Devotees regret what they regard as the disproportionate attention to Turtle Graphics at the expense of the general capabilities of the languages.

Their basic concept is quite interesting. There is a serious attempt to imitate the manner in which the mind appears to function, both in the flexibility of handling data and in the creativeness of the language. I shall attempt a brief explanation of these two features.

## Flexible data handling

I quote the Manual - "Variables may contain anything". It really means anything: numbers, characters, strings, procedures, lists, or any combination of these. All objects, including the program code itself, are treated as data. Bundle together whatever data you wish, assign it to *x*, and that is what *x* stands for. It seems a great idea. The system itself can identify the items stored in *x* (both the values and the datatypes). This may imitate how the mind handles data, but the poor human does not know what the computer system knows - it is outside his/her ken. Consequently there has to be a host of procedures called 'recognisers' (I counted 26 of them in the index) which enable the user to recognise what kind of object is under scrutiny. Examples - *isarray*, *islist*, *isrect*, *isstring*. These procedures return true if your guess is correct, and false otherwise (or in some cases they 'generate a mishap', which is AlphaPop for Error Message). In other words, you need the facility to ask the computer what it is thinking of!

The principal block of data is a list. List handling capabilities are perhaps the main strength of AlphaPop and probably also the main source of difficulty. I could not possibly give in a few words the full flavour of these capabilities but here is an example culled from the manual that illustrates something of both the list handling and the 'artificial intelligence' ambitions of AlphaPop:-

```
: alladd ( [ [ all gods are cruel ]  
:         [ all rabbits are harmless ]  
:         [ all men are mortal ]  
:         [ all gods are omnipotent ]  
:         [ socrates is a man ]  
:         [ mickey is a mouse ]  
:         [ olympus is a god ]  
:         [ fluffy is a rabbit ]  
:         [ plural of man is men ]  
:         [ plural of god is gods ]  
:         [ plural of rabbit is rabbits ]  
:         [ plural of mouse is mice ] ) ;
```

```
: forevery [ [ ?name is a ?x ] [ plural of ?x is ?y ]  
:           [ all ?y are ?z ] ] do  
:           [ ^name is ^z ] =>  
: endforevery;
```

The above routine searches all the given strings for matches. ? stands for wildcard the value of which goes into the following variable, e.g. name. => means PRINT the preceding information. ^ means use the value of the following variable. When the routine is RUN, the following printed output is obtained (\*\* signifies printed output):-

```
** [fluffy is harmless]  
** [olympus is omnipotent]  
** [olympus is cruel]  
** [socrates is mortal]
```

An extremely interesting example illustrates in a truncated version a program used in the "Computers and Thought" course at Sussex University. The program calculates the quickest route from A to B on the London Underground. Given ridiculously little information - a simple list of statements - plus 2 minutes per connection and 3 minutes per interchange, the program will assuredly deliver the correct result. In the process it will not waste time testing any route that will take longer than the minimum time. It will be fooled by journeys involving coming in on one fork and going out on another fork of the same line, but only to the extent that it cannot detect that a change is necessary. I cannot see on the existing network any situation where a wrong route would be produced, only a three-minute under-estimation of the time taken. Using the present data structures, it would be possible to detect these changes if all links on all lines are stated in the same direction. The stored routes would then need to carry additional information to indicate whether the link was established in a forward read or a reverse read. If the next link disagrees in direction with the previous one then a change is signalled, add three minutes and stay put. A change of line would need to be signalled, possibly by a neutral direction symbol. [Note to Cognitive Applications Ltd. - the data in the truncated version provided did not cover the situation described, so I extended it in order to prove my point.]

This particular program interests me from another point of view. A person looking at a plan of the Tube sees immediately the best route or routes. There is no way the blind computer can take advantage of this simple, helpful visual display. The program, for all its cleverness, is like teaching an elephant to stand on its trunk. It is a brilliant exercise in programming, but I suspect the only useful Route program will be a huge database giving instant access to the required information



- and this Pop program could of course be extended to create such a database! I must apologise for being so critical, but I confess that all attempts at 'artificial intelligence' appear to be a misconception and misuse of the real capabilities of a computer.

### Creative use of language

The most attractive feature of the Lisp languages is their open invitation to create new words; or should I say to define new words. You have the impression that you are creating the language. This is something of an illusion, because normally it does not differ so greatly from naming a label followed by a routine in any language. The DEFPROC on the BEEB must run it pretty close. But it does extend to the capability of redefining practically the entire language, with some necessary exceptions. This kind of flexibility again gives rise to interesting possibilities, but also creates additional problems. The programmer is expected to deal with the computer as though dealing with another person with powers of independent thought. This is really where the language falls down. The computer is not intelligent. Enormous amounts of memory are required to simulate simple actions that the mind performs instantaneously. The Lisp languages are notoriously slow in operation, greedy of memory, and fiendishly difficult to master. It is my view that they are attempting to make a silk purse out of a sow's ear. They are none the less stimulating and educational. The manual gives a very detailed account of exactly how the language works, how the two stacks, the Control Stack and the User Stack, normally operate, and how the user can manipulate these stacks directly. Operations that are normally transparent to the user are laid bare so that the advanced user will in effect be writing a program in a language of his/her own design.

### Documentation

Altogether the most impressive feature of AlphaPop is its documentation. There are two large spiral-bound open-flat volumes, one being the Language Guide and the other the Alphabetic Reference Manual, both practically error-free, both logically and clearly laid out. The Guide anticipates many difficulties the learner may face. It spells out, for example, the need to make a copy of a variable before sharing its value with another (so as to preserve the original value and create a working copy) otherwise the intended copy will overwrite the original.

### The environment

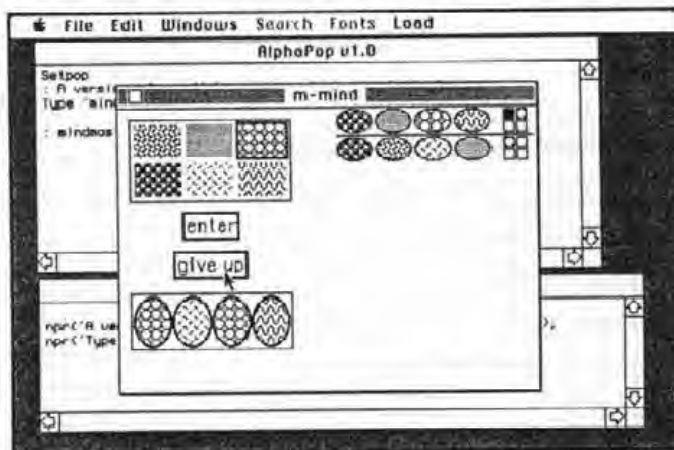
It was relatively easy to come to terms with the environment. A loaded program, which appears listed in the Edit window, can be compiled using the menu option 'Compile window'. Instructions on how to run the compiled program then appear in the 'Top Level' (Command) window (which stores a complete record of the session). Getting to grips with actual code is a rather slow process. The language is extremely rich and flexible. Consequently the guide has to be quite wordy - there is an awful lot of reading to do before you know enough to attempt anything. Complexities of indicating datatypes are a typical example - again I quote - "To Pop, characters are just an alternative way of expressing certain numbers". This is a further indication of the confusion that can arise, and there are four recognisers to

identify characters: *isuppercode*, *islowercode*, *isalphacode*, *isnumbercode*.

I remain confused on one point: the difference between identical and equal. If I have encountered the distinction before, I have long since forgotten it. It requires explanation. My current theory is that perhaps a copy cannot be considered as identical to an original.

### Macintosh compatible

In the present version the user has rather limited access to the power of the Macintosh. The most serious limitation is the inability to print from within a program. Command-Shift-4 (or 3) suddenly become great assets. This enabled me to print the screen of 'm-mind' (Mastermind). You are given some control over windows, and many (pseudo) Quickdraw routines are implemented. There is even a useful, fixed-size 'retained' (meaning self-refreshing) graphics window, in addition to a non-retained, resizable graphics window. No doubt that at the time of writing, many of these limitations no longer apply.



Sample program (Mastermind) using a 'retained' window

AlphaPop, written in Aztec C, is available from:  
Cognitive Applications Ltd., 4 Silkwood Terrace, Brighton, BN1 2LR

## Shop2000

Make sure you support your group  
by buying from Shop2000

We are now able to accept  
VISA cards and Mastercards  
in addition to payments by cheque

All prices are quoted inclusive of VAT,  
Postage & Packing



## Macintosh II P.D. Software comes of age.

Tom Wright looks at what's available for the MacII in the software library and was quite surprised at what he found!

### KOLOR

KOLOR is a Control Panel Accessory (for the Macintosh II) which was written by Russ Wetmore. Copyright is held by Apple, distribution is permitted provided that Kolor is not sold. This program works well and I recommend it to anyone who is either wanting to brighten the normal Mac II display, or, wants to take advantage of this opportunity for improving the display clarity for work purposes. You can also have some fun with it!

Kolor allows you to change the default colours associated with:

- a. Controls (buttons, check boxes, radio buttons, and scroll boxes)
- b. Windows
- c. Menus
- d. Highlighting (most notably used for text highlighting)

It does this by creating resources

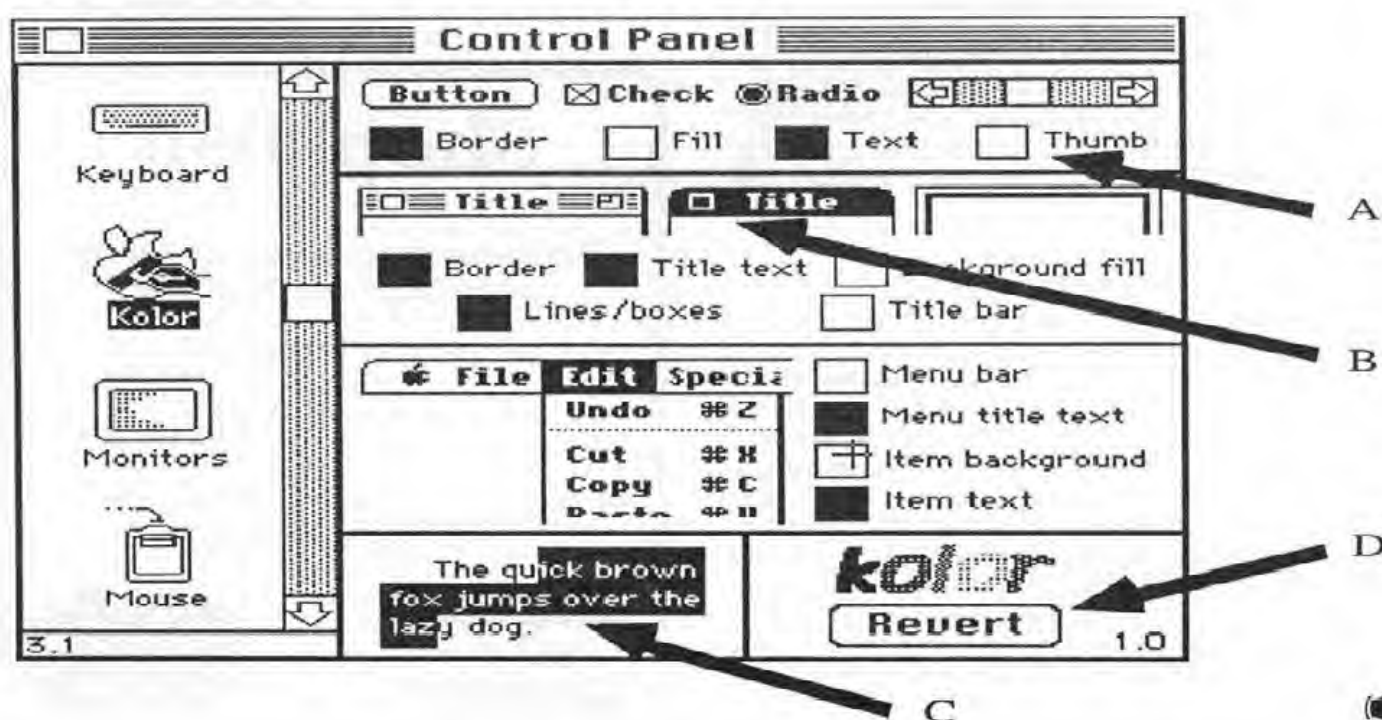
which are used by the various Managers as default colour tables if an application hasn't supplied them.

The installation procedure for Kolor is straightforward, you simply drag the Kolor Icon directly into your System Folder; the next time that you open the Control Panel you will find the Kolor Icon displayed in the scrolling list.

Select the Kolor icon to choose your personalized colors, you will then see a window something like the one below:

Colours are changed by selecting one of the areas indicated by "A" through "C", you can always change things back to the way they were before you started by clicking on button "D" so it is safe to experiment.

Kolor will only allow you to edit colors if your screen is showing 16 or more colors. For screen read ANY SCREEN if you are using multiple screens.





When you select a color box, or the text highlighting area, you'll see the "Color Picker", if you're not conversant with the "Color Picker" yet get your Macintosh II manual out again.

The System file is only updated for your new colours if you :

- a. Exit Kolor by clicking on another icon in the Control Panel scrolling list.
- b. Close the Control Panel.

Some applications have their own colour tables so don't be too worried if your selected colours are not visible immediately. In the event that you really cannot stand your selected colours simply hold down the Option key while selecting the Kolor Icon in the Control Panel then close the ControlPanel, all colours will then be returned to their factory settings.

## GRAYVIEW 1.01

GRAYVIEW 1.01 was written by David Fry and is a Macintosh II routine for converting Thunderscan SCAN files into '32 grey shade' images which can be used as StartupScreens as well as for pleasure. Grayview can also be used to view any PICT resource. While this program was especially created for converting gray scale Thunderscan images any PICT, including color ones, can be viewed.

In comparison with Version 0.8, Version 1.01 incorporates the following additional or improved features:

- a. Pictures can now have unlimited size.
- b. Full clipboard support.
- c. A six-fold increase in SCAN document conversion speed.
- d. Option to save file as a MacDraw file.
- e. Much better region selection for saving only sections of files or copying.
- f. Free space available shown in About box.

Converting from a Thunderscan file to a gray scale image is straightforward if you have your monitor set to at least 256 colors/grey scales (more than enough for the 32 needed to render the image faithfully), although it is a fairly slow process.

The Apple menu is modified by Grayview to enable the user to identify the number of bytes available for a picture,

and to keep track of how much space pictures take. Other menu options include

- a. specifying which file is to be viewed
- b. saving files as either PICT resource or MacDraw PICT files
- c. saving a portion of the active window image
- d. closing the active window or desk accessory
- e. quit program
- f. copying and pasting portions of an image in the active window, copied images can be freely moved to other applications using the Clipboard or Scrapbook

## Other Mac II items.

Some of the Mac II items available from the Apple2000 PD library are :

**RAINBOW 1** is the most beautiful demonstration of colour on the Mac II that I have seen to date, although it does not appear to have a practical use I recommend it to all Mac II users (it works in grey scales as well).

After double-clicking on the folder the user is treated to a continuously moving curve plot which gradually fills the screen. During and after plotting the colour and brightness of each curve is continuously varied.

Plotting is ended by a single click on the rodent (sorry, that should have read mouse) button, which results in a stack of six discs being drawn, the discs are then revolved by using directional colour changes. The final item that appears is a banner bearing the legend "Produced, directed and filmed entirely on location by Keith McGreggor, Pixel Resources Inc". My only disappointment with this demonstration is the lack of a facility for pausing the plotting process, or saving it at any stage, but then that was not the purpose of the program.

**COLOR ICONBOUNCE** displays about thirty five (suffered crossed eyeballs trying to count them) icons which slowly drift randomly about the screen. The program works in grey scales as well as colour while displaying the icons which have obviously been extracted from a range of applications. Andy Hertzfeld wrote this one.

**COLOR KALEIDOSCOPE** is by Beaverton Digital Systems using source code by Xerox Corporation. This program is an unremarkable kaleidoscope which the user is able to influence by providing alternative parameters to those provided as defaults. The program worked in grey scales as well as Colour but I did find that (with my setup) exit from the grey demonstration was via the 'resume' avenue.

**COLORBOXES f** by Neal Trautman, displays rapidly drawn coloured boxes which is I suppose what you should expect from the title.

**SPIROGRAPH MAC II** no indication of the author of this program. Colour of the plotted lines is varied randomly as is the background colour. Unimpressive.

**TESSERACT** I can't comment on this program beyond the fact that double clicking on the icon crashed everything ! The situation was restored following a panic phone call, advice was to use the Update facility from Apple HD SC Setup, at least two other people have also experienced a problem with this programme but Norah Arnold tells me that several other Mac II users have used it without problems. I am now busy writing fifty thousand lines for not reading Norah's advice at the beginning of the Mac Software Catalogue, ie that I should have been testing this software by booting from a floppy that contained the program. I am leaving Tesseract alone unless somebody can tell me a safe way of activating it.

**STARS II** is a desk accessory which produces a screen display designed to give the impression of travelling through space. The screen background is black with white stars moving towards and past the user. Exit from the display is via a single click.

**BIG ZOOMIDLE** is another desk accessory. When activated it produces a black screen on which is drawn, at dizzying speed, a trail of box outlines which move rapidly about the screen. Exit from the program is via a single click.



## Network News

---

The latest news, tips and gossip from Delphi, Infomac and Usenet; - about Hypercard, MultiFinder secrets, and languages for science.

---



From: RJWM  
Subject: RE: Launching or Sublaunching Another Application

Two related questions. The sublaunch facility that HyperCard uses does not require System 4.1-it works perfectly well with 4.0. How does it work? How can you make the launch of a document with an application from HyperCard into a one way launch, i.e. so it does not return to the HyperCard stack upon quitting the launched document?

Richard

From: DEWI  
Subject: RE: Launching or Sub launching Another Application

The first question first:

I'm slightly confused by the question, unfortunately. What do you mean by "return to the original document"? Let's hope I answer the correct question...

If the scenario is program A gets called with attached document A, program A sublaunches B with document B, then under MultiFinder you have the choice of keeping doc A open, or re-opening it after the sublaunch (just in case you weren't under MultiFinder and the launch didn't return). Unfortunately, you can't test for MultiFinder, you can only test for existence of the WaitNextEvent trap and Apple warns you that this might exist in the (non-Multi) Finder in some future system release (sigh). You can uniquely define the location of the document by the triad (volume refnum, directory ID, name) and re-open immediately after the launch. If you're saving the location of a document in a Resume File, then you might want to save the Volume name instead (if you reboot, and insert your floppies in a different order, it'll have a different refnum). The only glitch with this is with some esoteric networks where the directory IDs are dynamically allocated. Saving a pathname, a la HyperCard, would solve this

but is generally considered a bad idea with HFS. I don't understand all the ramifications of this yet...

In summary, working directories and directory IDs are a bit of a mess in my opinion!

And the second question:

The original sublaunch (the one that meant that the sublaunching program didn't have to live in the system folder) was in 4.0 but undocumented. It was officially announced as a 4.1 feature. The 4.0 version may be buggy for all I know.

I'm really not too sure what HyperCard 1.0.1 does. It's difficult to sublaunch with an attached document and then turn around and exit with MultiFinder, since the working directories get wiped out before the sublaunched program can use them. But then again, under MultiFinder HyperCard can only find documents at the root, which doesn't need a working directory.

Oh well, I said it was hairy... All of the above is mildly dubious, since a fair amount is empirical rather than official Apple gospel.

Best of luck! Dewi

From: PDNNOG

Subject: Red Ryder 10.3 thruput

One thing I just remembered. One of my friends was so bugged by the apparent slow thruput of Red Ryder 10.3 that he methodically stripped his INITs out one by one. It turned out that the FKEY Pop-Key thingie by Carlos Weber just about halved the thruput. When that was eliminated, Red is back to almost good. For those who can't live without FKEYS, a new alternative albeit commercial is contained within FontDA Juggler Plus, \$60 retail which can have up to 12 open fkeys, fonts, sounds (Mac II sounds on a plus!)DAs, etc. You can have up to 32,000 Fkeys with a renumbering accessory also included. Also a hot key to show you all the active fonts..in all their sizes to 24



# Macintosh

points, with any attribute (bold,underline, etc.) AND an FKEY that will allow you to print a line of text in all the available fonts in any style. Coded by Paul Cozza, a superb and responsive individual. This will be debuted at the Show, so look for it.

From: DSACHS

Subject: RE: What tools for serious scientific stuff?

You might want to look at ABSOFT FORTRAN 2.3. I believe that this is the only FORTRAN that presently uses the math coprocessor of the Mac II. This is likely to be better for you than PASCAL or C because: 1) You appear to be more familiar with FORTRAN 2) FORTRAN is an excellent language for numeric type applications

Microsoft Fortran (which is based on the ABSOFT product) is not yet up to a coprocessor supporting level. There may be a FORTRAN compiler that works with MPW (ABSOFT has its own linker...). The UNIX system is not yet, as far as I know, officially released.

From: ROWLAND

Subject: What tools for serious scientific stuff?

I've used the Absoft Fortran 2.3 - it handles the coprocessor OK. Seems a reasonable FORTRAN. I've ported scientific applications from a VAX with not too much trouble (there are some differences in syntax of non-Fortran77 statements, but they are minor). You might also consider getting MacFace (from McFaceware, 1310 N.Broadway, Urbana, IL 61801 ; (217)-328-5842) for interfacing Mac type windows, menus, etc. In fact, I think the same set of routines can be called from C. At any rate, I recommend that approach - the scientific programming part of the project is unfortunately a minor effort compared to making the Mac part work like we've come to expect. The MacFace approach evens that somewhat, but its still a lot of work. Good luck.

On a related topic - I'd like to see more of those research type programs available a little more generally. Went to a seminar at MIT a while back where the subject was the new supernova. The speaker gave a very nice topic talk and mentioned that he had this Mac program that would simulate the results of different initial conditions on observations. It would have been very nice if he had had a few disks with him. More

generally I'm rather surprised that there are not more of those type of programs, or an interest group on a net somewhere (or maybe I've just missed it).

Mike Burns Rowland Institute

From: U00300@earn.hasara5

Subject: Re: Hypercard Dialing with modem

This is a reply to an earlier message

I found out how to get Hypercard's Dial-function to work with a modem: the modem must assume DTR to always be true. Turn the modem off, set the appropriate dipswitch on or inside your modem, and switch the modem back on. On my modem, a lightspeed 1200, I did this by removing the front panel and setting switch 1 DOWN. After that it worked! Hope this works for you too...

Mactijn Koster

From: R.M.Smyth@uk.ac.qmc

Subject: Never mind "who am I?" - Who are YOU?

Some of you will take this message to be a gripe (it is!). To some it will be a plea (it is!). In others it may strike a familiar chord (if it does, let's hear about it).

For me (a Technical Author at a University of London Computer Centre) the Mac is a dream come true. This little machine has changed my method of working (sometimes I think it has changed my life, but this is not the place to go into detail!) to such an extent that it is now, truly, my workstation. I use it as a terminal, for WP and for DTP (manipulation of photographs next, I hope!). It allows me to pay proper attention to the visual aspects (something I consider important) of communication - yes, I know, the content is all important but there are too many DRY manuals out there!

As well as being important to me, I am always interested in Mac developments and, indeed, in any Mac-related info. Computer Centres are service centres so it is important that information is passed on. I was, therefore, well pleased to hear of the MAC-USER service initiative on IRLEARN. It took me some time to connect to it (gripe/plea number one!) since I have little knowledge of networks beyond JANET (UK Academic Network) and now I am beginning to wonder what I have let myself in for?

(Gripe/plea number two coming up). You people seem to speak a different language!

By now I know what a LISTSERV is (I think) but you don't make it easy! As to how I send commands to sign off, retrieve an index, or get general info, I have no clue whatever. It all sounds terribly interesting but if you don't make it easier, it is of no use to me. There is just not enough time in a day to spend a valuable portion of it trying to fathom networks which may or may not be useful (gripe/plea three).

It could, of course, be that I am in the wrong place and that LISTSERVs such as MAC-USER are for specific Mac people (those with DEC equipment, perhaps?). If so I will leave you in peace and sign off, but what a shame that would be. It is obvious to me that info on Mac-related topics is very valuable and will become more so. What is also important is that we, particularly on this side of the Atlantic, do not reinvent the wheel.

To end (at long last I hear you cry!). You undoubtedly provide a useful service and one which could be valuable to me (and others like me). However, you are making too many assumptions about your consumers (chief gripe/plea). I would love to have access to the US files and to the electronic newsletters such as INFO-MAC, and to communicate with Mac-users world wide. But I need more info. (What on earth an RFC822 is, for example, I have no idea!)

Keep on Maccing, but let me know if I'm in the wrong place!

Robert Smyth

R.Smyth@QMC (on JANET)

Computer Centre Queen Mary College  
Mile End Road London E1 4NS

From: YOSSIE SILVERMAN

Subject: C compilers for Cross System development

Has anyone heard of a C compiler that runs on the Mac that will generate a standard (if there is such a standard) Object format suitable to be transferred to a 68000-on-a-board computer such as a VME-BUS compatible board. Basically I am looking for a C compiler and/or an Assembler that would output such a file which could then be downloaded via the boards monitor into the boards memory. Obviously I require \*NO\* Macintosh system support since the target machine is \*NOT\* a Macintosh. If such a creature does in fact exist, please send me mail

about it. As usual, I will summarize any responses I receive.

Yossie Silverman

From: DAVID A. BELSLEY

Subject: Hypercard field-check question

How can one make a Hypercard field insist on information in a specific form? Specifically, suppose one wants a field only to contain a number. After the first entry into that field, one can capture the closeField to check that the entry was indeed a number and then beep and perhaps select the field as a response. But, if the user just ignores this and goes off to another field, there is no way to trap this action since no further closeField messages will be sent. A closeField is only sent if the contents of the field are changed.

As a current solution, I use the first closeField to put the user in a repeat with an ask box that will not go away until a proper number is entered, but this is a bit awkward and not very Mac like.

Any suggestions?

David A. Belsley, Boston College

From: DAVID A. BELSLEY

Subject: Simultaneous field scrolling in Hypercard

Has anyone figured out how to make two fields scroll simultaneously in Hypercard? Clearly while the mouse is down on the scroll button of one field, no messages are passed, even "idle" or "mouseWithin." It seems impossible, then, to pass a message to another, parallel field to follow along in the scroll. It can be done sequentially. The one field scrolls and, once the mouse is up and idle messages are passed again, the other field can then be made to set its scroll equal to that of the first field, but this is hardly a very satisfactory solution. Furthermore, when the second field scrolls, any selection made in the first field is lost, so it is impossible to select beyond the showing part of the field.

The problem is the lack of a "filter" facility while a text field is active. Unless I am missing something cute, I don't see a way around this and would appreciate suggestions. Otherwise, I hope the Atkinson group is listening.

On a related question, is there any way in Hypercard to return the current cursor position so that it can be put back into place when a field is closed and reopened?

It appears that the "toolbox" text field is

not really suited to Hypercard and that a more sophisticated facility is needed.

David A. Belsley, Boston College

From: Robert Joseph Hammen

Subject: Re: Sounds, HFS Backup

>From: Brodie Lockard <LISIMO@MACBETH.STANFORD.EDU> >Subject: Two unrelated questions:

>What are the steps in converting a SoundCap or SoundWave document to a 'snd' resource that can be played as a SysBeep? There are a couple of methods that I know to do this. There is a shareware program called "sound->beep" that lets you convert the SoundCap/SoundWave file to an 'snd' type 1 resource. Also, I believe that someone has developed an swci resource for SoundWave (an extension of the program) to save sound files in the correct format.

There is a program similar to "sound->beep" in the Sound Mover Package, which I just posted to Sumex-Aim. I haven't played with it yet to determine if it saves files in the type 1 or type 2 'snd' formats.

Question: does anyone know of a program that can convert between the two 'snd' resource formats? Does anyone know of a program that can convert from either 'snd' format back to SoundCap/SoundWave?

>From: Paul Skuce <mexax!hatfield.ac.uk!compts@uunet.UU.NET> >Subject: Re:HDBackup

>I now use PCPB HFS backup. V1.1. I have v2 but it only works on the drives it came with. I believe you can get a version that works on all drives.

Don't use versions of HFS Backup <2.0 if you want a reliable backup of your files. Version 1.0 had a particularly nasty bug in that it didn't back up all of the files on a volume, as a local BBS sysop discovered when his BBS crashed and the file section directories weren't restored. Version 1.1 seemed to back up all files, but it had some other problems, particularly with the BackupDirs (if memory serves me correctly).

Robert Hammen

From: Alan Takahashi

Subject: Who is IBM?

Thought this might be of some interest...

>From PC Week (Jan 5, 1988):

"IBM? Who Are They?"

"Datapro Research Corp., a computer-analysis firm based in Delran, N.J.,

last week announced its list of top PC hardware and software products for 1987."

"Apple Computer grabbed top honors in both categories. The Mac II and Hypercard were voted the most significant hardware and software products, respectively."

"IBM's PS/2 machines and OS/2 operating system weren't mentioned."

Alan Takahashi

From: Nigel Perry

Subject: HyperTalk Questions + Laserwriter Question

Could somebody please help me with the following problems/questions?

HyperTalk =====

1) Is there a "proper" way to catch keystrokes? There doesn't seem to be a message for them - HyperCard always seems to grab them and use them in the message box or a field. I have got around the problem by installing an "idle" handler which grabs characters from the message box and sends them as keyDown messages - but it is slow and typing too fast loses characters... (If you wonder... my current application is a "Speak & Spell" card as part of a MacinTalk interface stack. I would also like to have "menus" were you can select by pressing a key instead of a button.)

2) Is there a way to change AND keep changed the cursor while in Browse mode? E.g. I would like the cursor to change when over a button/field, catching mouseEnter/mouseExit and using "set cursor" doesn't work as once the handler has completed the Browse cursor is restored. Any ideas?

Laserwriter =====

Can somebody send me, or tell me where to find, the format of a FONT/FOND and Laserwriter font file for a downloadable font. In other words I have a screen bitmap font & a postscript font description for it, all I need is how to package them up so that the Laserwriter driver will download and use the postscript.

Thanks in advance for your help.

Nigel Perry Department of Computing Imperial College London England

From: Eric K. Olson

Subject: Re: Mac II Color Graphics Standard?

Unfortunately, there are many formats for color and/or grayscale information gener-



ated on a Mac II:

The most general way to move PICT 2 (Mac II PICT) data is via the clipboard. This allows any program that opens multi-bit windows to pass color pictures in and out of itself. It doesn't require any special file type, so it is supported most easily.

A PICT file contains the same information as a clipboard PICT, but stored in the data fork of a file. PixelPaint supports this format. Some older Mac software (MacDraw) can also generate this type of file, but not in color.

A GrayView file contains the same information as a PICT file and a clipboard PICT, but stored in a PICT #0 resource in the resource fork of the file. This is the format of a Mac II StartUpScreen, as well as a DeskPicture for use with the DeskPic INIT. If the file contains an original Mac-screen size bitmap (uncompressed) in the data fork, that bitmap will be used as the StartUpScreen on a non-Mac-II.

The drawback of all the PICT formats is that they cannot be generated easily on a non-Mac-II, and if PICT 2 data is displayed on a non-Mac-II, it will be displayed as black & white, with white being > 50% luminance (the same display you would get if you displayed them on a Mac II set to 2 color mode). For this reason, there are formats which can hold grayscale information useable by non-Mac-II's, also:

TIFF is a "standard" scanner format, which can hold either a huge bitmap containing 100% black and 100% white pixels (data from scanners is usually in this format—but sometimes in greyscale), or a grayscale picture, a Pixmap (multi-bit-per-pixel BitMap) containing pixels varying in intensity (usually 16 or 256 gray levels per pixel). It can also represent color information, but without a lookup table (gray data doesn't need a lookup table as much), usually 2 bits each for red, green, and blue. TIFF is an extensible format, so software written a while ago sometimes cannot deal with newer TIFF file (for instance, grayscale TIFF is newer than scanner TIFF).

ThunderScan GrayMap format can represent up to 64 gray levels per pixel. I find it useful for backwards compatibility. ImageStudio can read this format. ThunderScan can include a grayscale map (pixel value to intensity lookup table, also called

a transfer function).

RIFF (Raster Image File Format) is the native format for ImageStudio. It can store grayscale information up to 256 grays per pixel, and can store color information with a color lookup table (although I know of nothing that will read a color RIFF file).

Since ThunderScan and ImageStudio both run on Non-Mac-II's, GrayMap and RIFF files are somewhat more universal than anything using a PICT format. TIFF is quite universal (even when moving to IBM-PC's, although byte-ordering may become a problem if the importing application isn't careful), but can contain so many different kinds of information you never quite know what you'll get. Hope this helps.

-Eric

From: TONYN

Subject: **MultiFinder and RamStart**  
MultiFinder and RamStart

Working on my RamStart program in the last couple of days, I have ferreted out a few secrets of MultiFinder.

MultiFinder is an operating system extension that adds capability to the Macintosh OS and Toolbox. In no sense does it replace the Finder; it only allows the Finder to do new tricks.

The file MultiFinder is an application that installs the extensions. This means that RamStart can launch MultiFinder as its exit application, by using a script file, and that TMON can be used with MultiFinder if it is launched first.

Apple describes this technique in the document, "Are You MultiFinder Friendly?" (but I find that the Finder crashes every time I exit TMON, and it seems odd that a couple of seconds after I option-interrupt into TMON that the cursor changes to the Watch).

\_Launch is one trap that behaves differently under MultiFinder. RamStart normally gets the space for the RAM disk by adjusting BufPtr (the way debuggers and the HD 20 file do), but it will have to work differently to run under MultiFinder. BufPtr affects InitApplZone, which is no longer called during Launch (I infer) because the real ApplZone, the one just above the System heap, is now the MultiFinder heap.

When MultiFinder launches an application, it creates a new sub-heap for it in a

locked handle at the top of its own heap (using \_MoveHHI?).

The Temporary Memory Allocation calls also allocate handles in the MultiFinder heap. They are simple wrappers around the usual Memory Mgr calls that set the MultiFinder A5 world (except keeping the current QD vars) and the MultiFinder heap zone and then call glue code. Either MultiFinder is written in C using a very clever compiler, or in assembler by a very dull programmer.

Since the temp mem calls are so simple, you may allocate memory that lasts until MultiFinder quits. This is good for RamStart.

On the other hand, you must be careful to dispose of any temp memory you get, as MultiFinder will not, even when your application quits. As Apple has not documented this behavior, they may change it in the future. It would be a disaster for RamStart if the calls start tagging the blocks with the originating application, but they might someday.

The MultiFinder temp mem calls are accessed by a selector passed to the new trap OSDispatch (A88F). The dispatch table holds 40 entries, and I am curious to know what the other entries are for.

Tony N.:

From: DDUNHAM

Subject: RE: **MultiFinder and RamStart**  
I've been using TMON with MultiFinder all along. Don't tell me you don't have the INIT loader for TMON? If not, get it!

.....  
**Info-Mac** digests consist of submissions by individuals on the academic computer networks. Submission and distribution of these digests is by network, moderated by volunteers at Stanford University.

**Usenet** is a loosely-coupled network of co-operating academic and commercial computer systems. It is a non-profit network whose primary aim is the sharing of technical information and the spreading of research results.

**Delphi** is a commercial time-sharing and bulletin board system. The Delphi Digests are made available thanks to Jeffrey Shulman of Rutgers University.




## Draw it again Sam...™



The demo version of Draw it again Sam...™ can be found on the MacLibrary Disk 904 Update 4.



 Draw it again Sam... is a powerful object-oriented drawing program that provides several unique capabilities. Some of the special features of this program are:

- Libraries
- Layers
- Drawing Modes
- Colour

Libraries allow you to place complex drawing elements into a palette at the bottom of the screen. By selecting an icon representing a drawing element, the picture belonging to that icon can be placed into any open drawing. Groups of pictures in a library can be saved in library files. This does away with the difficulty of cutting and pasting pieces from other drawings through the clipboard and scrapbook.

Ten drawing layers allow you to control overlapping parts of a drawing independently. The layers work much like the clear acetate overlays used by commercial artists. Each layer can be saved, viewed, and printed separately or together with other layers you specify.

The four drawing modes, Opaque, Clear, Invert, and Erase, allow objects and patterns to interact in new and interesting ways resulting in stunning visual effects.

The eight-colour capability provided by the program allows you to work in colour on all currently sold Macintosh™ models from the 512Ke up. On the Macintosh II™ with a colour screen colours are visible on screen. With monochrome systems, colour can be printed on suitable printers.

The Draw it again Sam... screen has four basic areas: The Menu Bar, The Window, The Tool Pallet, and The Library Area.

Certain keys affect how the arrow pointer works, modifying its behaviour if the key is held down while the arrow is used. The shift key acts to include or remove an object from the objects already selected. Previously selected objects are

left selected, and the object clicked on is added to the set of selected objects or removed from the set depending on its initial state. The option key allows an object underneath another object to be selected. When held down, clicking on an object does not select that object. Instead, a marquee can be pulled by the mouse, which selects only those objects that fall completely within it. The marquee must surround all handles belonging to the object. The option key can also be used to change a selected object to a different type by clicking on a different tool while the option key is held down. This is useful for deconstraining objects: a circle can be made into an ellipse, for example.

The command key causes re-sizing and dragging operations to occur only on one axis. As the mouse first moves, one axis, either horizontal or vertical, is moved along more than the other. The object is forced to move only along the axis in which the mouse first moved.

Arrow keys on the keyboard nudge selected objects one pixel in the direction that the arrow points each time they are pressed.

There are the following tools:- rectangle tool, square tool, rounded rectangle tool, rounded square, ellipse, circle, line, constrained line, parallel lines, polygon, free form, registration mark, arc and text.

File commands perform the usual functions, such as opening and closing documents. Three additional special commands are available:- Save Layer As..., Change Pad Size, and Setup Rulers.

This document contains brief documentation of the program. The demo version of the program available on MacLibrary Disk 904 Update 4 is only for review. Several of the features, such as saving drawings and creating new libraries, have been disabled. More information can be sought from Aba Software Inc., 2 Davis Ave, Frazer Pa 19355-0915.





## The Graph Stack

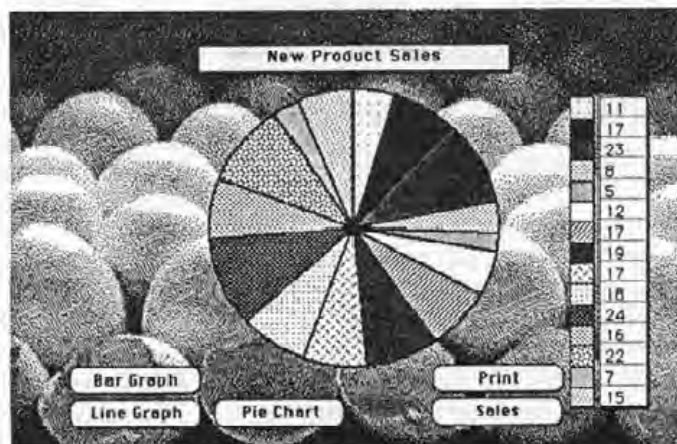
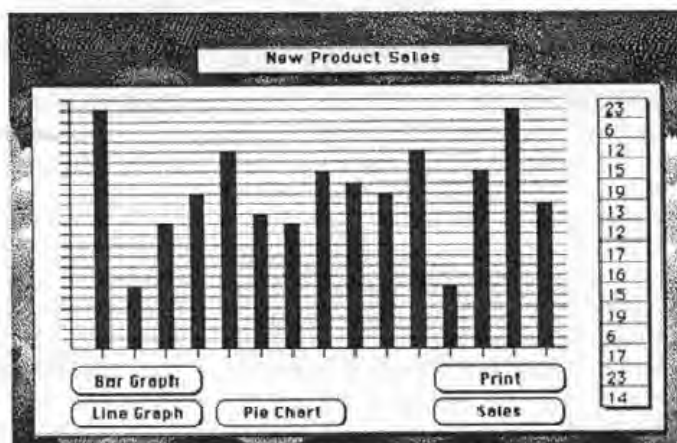
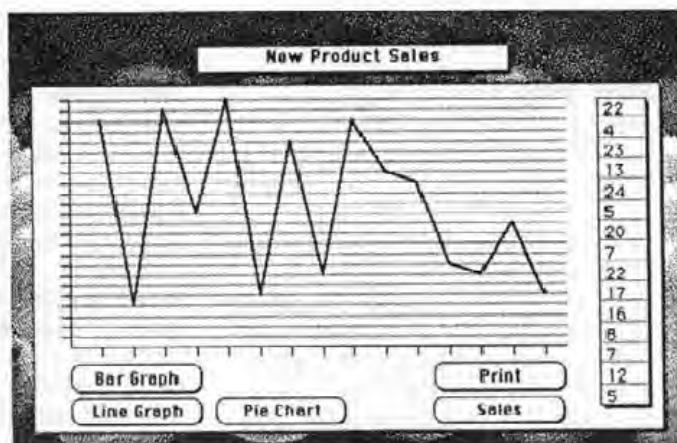
The Graph stack has buttons for bar graph, line graph and pie charts. It is available on MacLibrary Disk 280, HyperStacks 20.

When you first open the graph stack, the card that appears is usually the bar chart. This comprises the chart itself, the data in a block down the right hand side, and five buttons. The buttons will let you display your data in the form of a bar graph, line graph or pie chart. The 'Print' button will print the card, and the 'Sales' button will generate a new set of random data.

There is nothing in the stack to identify its origin, but it certainly gives useful examples of scripts to produce graphs. One point of interest is that when I spent a while trying to make the stack crash, the only peculiar result I achieved concerned the use of zero value data in the pie chart. While the bar chart and the line chart seem able to tolerate zeros in the data, the pie chart appears to bleed to death when it encounters a zero.

However, this does not alter the fact that it is very useful to be able to give some other stacks the ability to show and print graphs. I appended this stack to two other stacks and

then amended the background screen to remove the reference to New Product Sales and amended the script to collect the relevant data.



# Mac Library

There are fifteen new Macintosh Library disks this month. Disks 904 and 905 are both temporary Update Disks as described in the previous MacLibrary column. There are three new demonstration disks of the major applications FullWrite Professional and Reflex® Plus. The HyperCard Stacks keep coming thick and fast and there are ten new disks of stacks.

## Disk 904 Update 4

**Update 4** contains 10 items on the desktop: - Giffer, DIAS, Hierarchical Menu Demo, Modula 2 Make, QuickStart, Teleport 4.1, RISK, MultiFinder Keys, PK font converter, Draw DA.

**DIAS** is short for Draw it again Sam™ and this is a demo version of the program. Some of the features of the program are Libraries, Layers, Drawing Modes, Colour.

**Draw DA** is a desk accessory that supports object oriented drawing. The documentation gives a full list of its features.

**Modula 2 Make** is a small utility to be used with MacMETH Modula 2.

**PK Font Converter** is a TeX to Macintosh font converter. It takes as input a PK font file, and produces as output an RMaker source file for the corresponding Macintosh font. It should work in other UNIX-like environments, such as the MPW shell.

**QuickStart** - By setting QuickStart as Startup, you can execute a QuickKeys sequence without first arriving in the Finder.

**Teleport 4.1** is an application launcher that is compatible with MultiFinder.

## Disk 905 Update 5

**Update 5** contains 20 items on the desktop: - News Reader 1.8.6, Artisto, QuickerGraf, TimeKeeper, Password, RingWarp demo, MacFormula, Preview 1.5, Hearts, Application Menu, New MClock, MiniWriter 1.4, MenuTime, RamDisk+, µPaint DA, Ball & Stick, Crystal Quest Sample, Timed launch, Elapse, Gunshot.snd.

**Artisto 1.41** is a desk accessory

of the "Paint Cutter" variety. Artisto allows you to open up a MacPaint document from inside any program that supports desk accessories and select any portion of the image and copy it to the clipboard. From the clipboard, the graphic can be pasted into an application. You must have a 512K (or larger) Mac in order to use this desk accessory. It now works with FullPaint.

**Hearts** plays three hands of the card game hearts and lets the Macintosh user play the fourth hand. Plays the "Black Lady" variant of hearts where the Queen of Spades counts 13 points. Developed by Tom Hedges and Mark Zimmer.

**MacFormula** is a tool for chemists; particularly for graduate students who are conducting research in the lab and find it necessary to compute molecular weights frequently.

**MenuTime** is just another digital clock on the menu bar. This is a slightly revised version of MenuTime to move the clock out of the way of MultiFinder's small icon.

**New MClock** is the functional equivalent to JClock, but with some extra bells and whistles, and it looks better under MultiFinder.

**Password** - This utility is to stop other people booting up your Mac from its Hard Disk (or any System Disk you put this on); it will not stop people from inserting another system disk into your Mac and using that to boot it.

**Preview 1.5** is a replacement printer driver which allows printed output to be viewed on the screen in miniature.

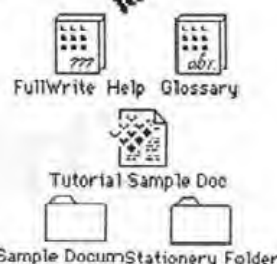
**RamDisk+** is an internal RAM disk for the Macintosh Plus.



FullWrite Demo

## Disk 103 Demo 13

This disk is the program disk for the FullWrite Professional Demonstration. It must be used in conjunction with the following disk which is Disk 104 Demo 14, as this disk contains the files which complete the demo.



## Disk 104 Demo 14

This is not a stand-alone disk but must be used in conjunction with the previous disk, number 103.

## Disk 105 Demo 15

This is a demonstration disk for Reflex® Plus, The Database Manager.

## Disk 276 HyperStacks 16

Disk 276 (8 items on desktop) Atlas 1.1, California 1.1, Amanda Stories folder containing Inigo



Takes a Bath and Your Faithful Camel, The Whole Earth Catalog Stack, Cartoon, Cat Walking, TimeLog, Your System 1.0D1.

**Atlas 1.1** is a stack containing different views of the globe which can be flipped through at speed so that it appears like a rotating Earth. It can also home in on California and utilises the California 1.1 stack to do this. **California 1.1** can be used alone and shows how maps can be flipped through so that it appears that one is zooming in on a certain area of the globe.

**The Amanda Stories Folder** contains another delightful pictorial story of Inigo the cat called **Inigo Takes a Bath**, a follow up to Inigo Takes a Walk. **Your Faithful**



**Camel** is another pictorial story, also by Amanda Goodenough.

**Cartoon** is a very short animated sequence.

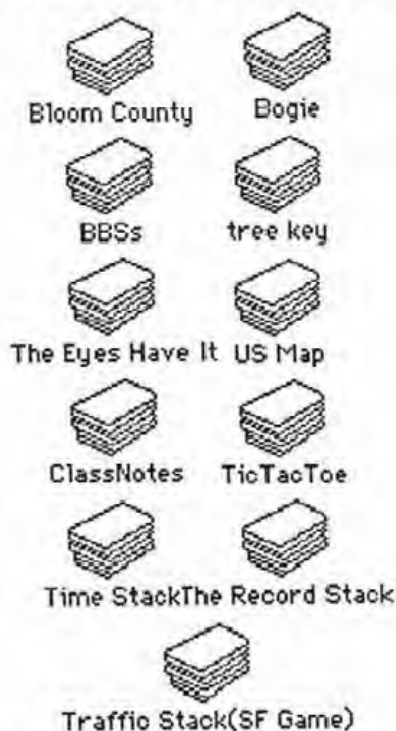
**Cat Walking** is another animated sequence, looped to continue until the mouse is clicked.

**Timelog** gives a card set out to enable the user to log the time spent on a task in any day. Once the times of starting and stopping work are entered the calculation is done for you.

**The Whole Earth Catalog** stack is a Hypercard version of the Whole Earth Catalog messages from the Well. To the UK user it is probably more useful as a demo of text importing facilities in HyperCard.

**Your System 1.0D1** has only one card which is able to tell you the following facts about the setup it is running on:- Machine type, system version, processor, Has FPU?, Has Colour QD?, keyboard type, AppleTalk version and lastly WDRefNum.

### Disk 277 HyperStacks 17



**Disk 277** (11 items on the desktop) Bloom County, Bogie, BBS's, Tree key, Class Notes, Traffic Stack(SF Game) Time Stack, US Map, The Eyes Have It, TicTacToe, The Record Stack.

**Bloom County** is a stack which is more interesting than it appears at first sight. Clicking on various areas of a picture will produce sounds:- a musical phrase, a spoken word or a word spelled out and at the same time printed in

the message box. Could be extended for many uses.

**BBS's** gives a very long list of numbers of Bulletin Boards in the USA together with addresses and the type of information found on the board.

**Bogie** is another sound stack, the card gives a choice of three phrases to be spoken by Bogie.

**Class Notes** shows a way of using HyperCard as an electronic prospectus, so that students can browse their way through cards giving details of courses.

**The Eyes Have It** - not easy to describe this stack, but the eyes definitely have it.

**The Record Stack** by Larry Half. This stack can be used to catalog a music collection. It allows for data to be entered and sorted, including a play list. It is hoped that future improvements will include a way to be able to attach a bit of music to songs in a play list, so that when they are clicked on the music will be played.

**TicTacToe** - a HyperCard version of the game.

**Time Stack** gives a rather nice analogue clock with moving second hand and date.

**Tree Key** helps you identify the type of tree by answering questions about the leaf. This stack could be extended to become a useful identification tool.

**US Map** - clicking on a State brings up a card about the State. **Traffic Stack** - this is a Science Fiction stack set in the year 4096. The artwork is very good but the story is as yet incomplete.

### Disk 278 HyperStacks 18



Clip Art

**Disk 278** (1 item on desktop) Contains only one stack entitled Clip Art.

**The Clip Art Stack** contains over five hundred cards, each card holding one item of clip art. The subjects include the following:- fishes, crabs, butterflies, spiders, insects, frogs, tortoises, dogs, horses, dinosaurs, trees, watches, clocks, keys, nails, saws, tools, knives, shoes, lamps, scissors, lamps, birds, musical instruments, cars, carriages, crockery, coffee makers, cups, vegetables, pipes, eyes, pointing hands, borders, corners, stars, suns, moons, corner symbols,

corners of borders, arrows, bells, US Presidents, flowers, floral designs, womens faces, mens heads, astronauts, cartoon figures, children, sport figures, witches, Christmas figures, owls, chicks, turkeys, monkeys, Easter bunnies, decorative labels, pottery.

### Disk 279 HyperStacks 19



**Disk 279** (11 items on the desktop) Cheap Sequencer, No Peeking and CmdOptionTrap, Combo, Cool Buttons, Cursor Stuff, Datebook, Concentration 2.2, Stack Appender, Shift Window, Script Reader 1.1.

**Cheap Sequencer** stack is a personal sampled sound sequencer created and produced by Chuck Walker. It enables you to add a sound by using the SoundCap-Mover stack to create and install SND resources, or use ResEdit to move an existing sound to this stack. It then enables you to make a sequence etc.

**No Peeking!** and CmdOption trap appear to both be about the same thing:- how to stop other people looking at the script of your buttons.

**Combo** - on the first card is a self-replicating button called Combination. When clicked it will create another card, in this stack or in a new stack, or in a previously created stack. After making the card, a button will be created that links to the newly created card. Then it makes a copy of itself on the newly created card, and returns with the tool in the browse position.

**Concentration** is a stack con-

# Mac Library

continued

taining a two player or one player card game.

**Cool Buttons** gives seven buttons which draw different figures of shapes and lines when they are clicked. Cursor stuff identifies the cursors available.

**Datebook** is a calendar which will give 1988 but annoyingly opens at the last part of 1987. Get modifying!

**Script Reader 1.1** gets the scripts of all the objects of a designated stack and puts them into cards in the Script Reader.

**Shift Window** is a utility for MultiFinder users. It contains scripts which move the card window to the bottom of the Mac screen so that you can see the Finder.

**Stack Appender** does exactly that. It appends Stack A to the end of Stack B.

## Disk 280 HyperStacks 20



**Disk 280** (12 items on the desktop) Defect Selector, Deprotect, Dialog Demo 2.1, Ha Ha Ha, EarthStak, Ed's HyperWriter, File Index, Font Tester, Graph Stack, Hidden Scripts, New.Home, Off-Line•3 stack.

**Defect Selector** stack can be used to 'gather up' Defect Reports from the Bug Base stack according to criteria you select by typing into the search fields.

**Deprotect Stack** has a button which will prompt for the name of a stack and then, if possible, remove any password for that stack and set the maximum access level back to Scripting.

**Dialog Demo 2.1** - this stack was developed by Apple Inc. to show how HyperCard could be used as a front-end to an on-line service such as DIALOG. It shows the possibilities of using HyperCard as a telecommunications front-end.

**Earth Stak** is another revolving earth animated sequence of cards.

**Ed's HyperWriter** is a simple text editor for HyperCard.

**File Index** is exactly what it says it is.

**Font Tester** lets you determine if your system contains all of the fonts and font sizes used by the WildCard Stacks.

**Graph Stack** demonstrates drawing line graphs, bar charts and pie charts.

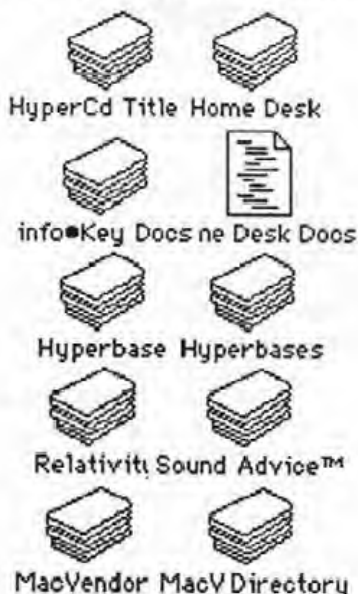
**Ha Ha Ha** - you need a sense of humour for this.

**Hidden Scripts** gives tips for finding other people's scripts.

**New.Home** is a HyperCard Stackware Development Application with a HyperCard Editor and Text Editor.

**Off-Line•3** stack gives access to text files of comments and items of interest to Mac owners.

## Disk 281 HyperStacks 21



**Disk 281** (10 items on the desktop) HyperCard Title Loop, Home Desk, Home Desk docs, Hyperbase, Hyperbases, Sound Advice™, Info•Key Docs, Relativity3(comix), MacVendors, MacVendors Directory.

**HyperCard Title Loop** - this stack puts up a looped sequence of cards detailing the major features of HyperCard.

**HomeDesk** - a rather novel type of Home Card, with a document.

**Hyperbase** gives the user a quick and easy way to switch from HyperCard to other applications.

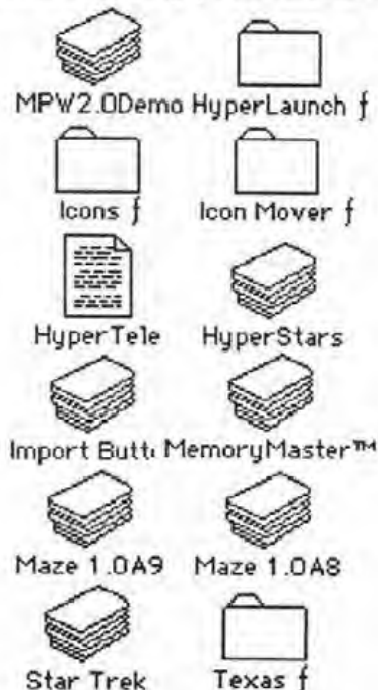
**Sound Advice™** is a way to import SND resources into your own stacks and can also act as a kind of sound library.

**Info•Key Docs** stack gives information such as the current date and time, mounted volumes and info about them, RAM info - number of bytes free, System version and Current Application.

**Relativity3(comix)** - a graphical adventure consisting of cards.

**MacVendors and MacVendors Directory** - The MacVendors stack gives you a quick and easy way to locate the vendors of the major Macintosh applications and hardware.

## Disk 282 HyperStacks 22



**Disk 282** (11 items on the desktop) MPW 2.0 Demo, HyperLaunch folder, MacWrite document entitled HyperTelecomm, Icons folder, Icon Mover folder, Memory Master™, HyperStars, Maze 1.0A8 and Maze 1.0A9, Import Button Stack, Star-Trek-



TNG.

**MPW 2.0 Demo** - this stack gives an insight into the workings of the Macintosh Programmer's Work - shop.

**HyperLaunch v 1.5** enables you to launch other applications from within Hypercard. Has an 'Add' button which makes a text only button with the name you give it. You can then add an icon and move it around freely. It also helps with finding the correct paths. Has help and docs.

**Maze 1.0 A8 and Maze 1.0A9** - this stack needs an awful lot of patience.

**Memory Master** by David Leffler. This HyperCard stack helps you to memorize a poem, speech, or any text in a simple manner.

**HyperStars** is a stack which can act as a screen saver.

**Import Button Stack** does just that.

**HyperTelecomm** MacWrite document - describes a project currently underway to expand Hypercard's telecommunication facilities. The goal of the project is to produce a developer toolkit, not a finished application.

Icon Mover folder which contains **Icon Mover 1.1** which is an FKey which will convert up to twenty ICN#'s from one application to ICON resources in a second application. It was created for use with Hypercard.

Icons folder.

**Star Trek-TNG** - an amusing stack giving details of the crew members of the latest Starship Enterprise.

**TEXAS** is a HyperCard stack which lets you browse through multi-megabyte collections of free-text information. TEXAS includes facilities for building and sorting a complete inverted index to every word in a 'dataspace' text file.

### Disk 283 HyperStacks 23



Illusions



Import Paint 0.3



Lunar



Mac Tips.



HyperSleep



Memos



Tech Tour



RRH BBSs

**Disk 283** Illusions, Import Paint 0.3, HyperSleep, Lunar, Mac Tips folder, Memos, Tech Tour, The List of RRH BBSs.

**Illusions** gives a series of cards showing optical illusions.

**HyperSleep** gives a screen saver for those who use HyperCard's Home Stack as their main desktop screen.

**Import Paint** has a 'Copy Picture' button which can be customized to copy any part of a MacPaint document and to paste it anywhere on a card.

**Mac Tips** from MacMania contains a stack giving tips on the use of the major Mac applications, HFS and the Finder.

**Lunar** is an implementation within HyperCard of the classic Lunar Lander game.

**Memos** provides a quick way of making a stack of memo cards with graphics if you wish.

**Tech Tour** gives a technical tour of the Macintosh SE.

**The List of RRH BBSs** a list of Red Ryder Host Bulletin Boards updated as for September 1987.

### Disk 284 HyperStacks 24



TN Zone Index



TN Zone

**Disk 284 Tech-Note Zone** by Reggie Seagraves.

**Tech-Note Zone** contains all the Macintosh Technical Notes to 162 in the form of a HyperCard Stack. Technical Notes may be printed etc. There is also a Technical Notes Index Stack to guide you to the note which would be of most help to you. Clicking on the title of the Note you want in the Index will transfer you to the Tech Note Zone Stack and directly to the correct Technical note whose title you clicked.

### Disk 285 HyperStacks 25

**Disk 285** contains two stacks, Music Cards and the NASA Videodisc stack. **The NASA Videodisc Stack** was intended to control the NASA videodisc. It has some good NASA graphics and gives an exciting glimpse into what the videodisc might contain. Unfortunately we do not supply the videodisc with this stack!

**Music Cards** provides a way of organizing information about composers and their works, etc.

**All the HyperStacks disks listed above need HyperCard.**

## The MacEurope Magic Toolbox™

MacEurope brings you the opportunity to have a much bigger floppy than anyone else. A full 10MB of crushproof data and programs. When we first saw this device we were stunned. Faster than Bernoulli, we thought, and easier to spell. Seemed a winner to us. Much more advantageous price/performance ratio (i.e. cheaper) and cartridges you slip into a pocket rather than a suitcase.

Plus I can  
take it home  
at night...



## Infinite Storage £3 a megabyte.

promac engineers have weaved a spell over technology to achieve a system which is faster than many fixed SCSI disks, yet with the security, convenience and really low expansion cost you can only get from a removable medium.

Accountants, publishers, students. Spycatchers.

**ProDrive 10** is the disk for everyone.

Stocked by MacEurope Dealers. If yours doesn't have stock, or you don't have a dealer, please call us.

Literature and solid advice.

From MacEurope. Of course.

promac distributed exclusively by MacEurope.  
Magic Toolbox trademark registered to MacEurope



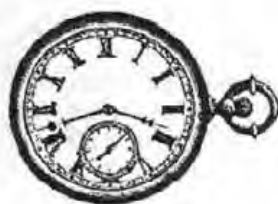
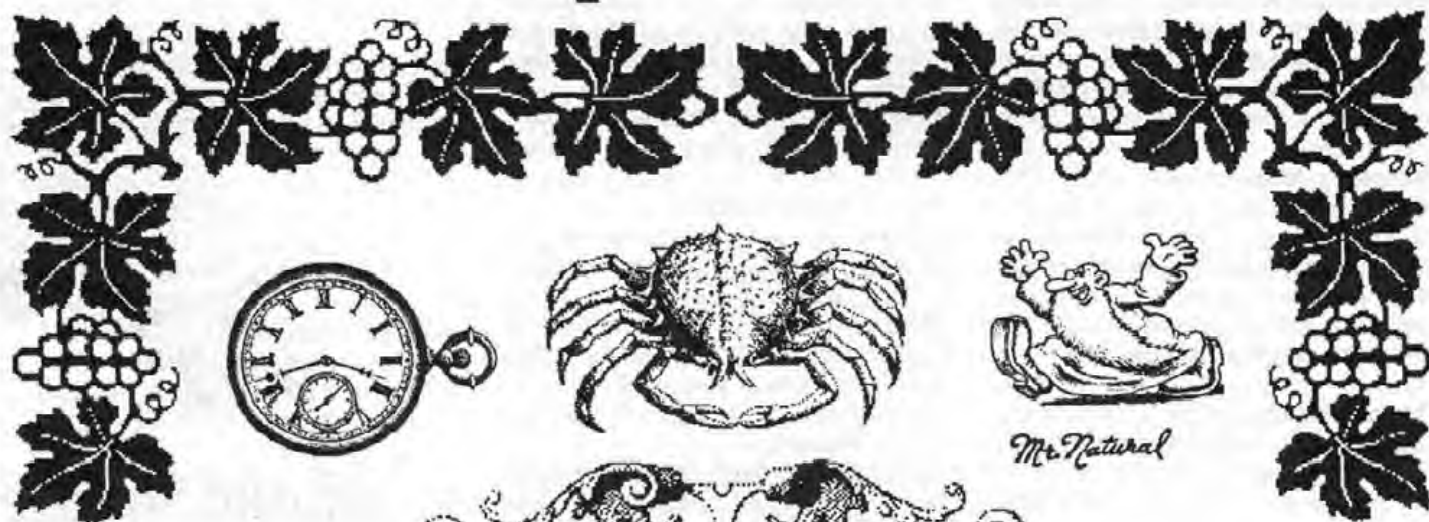
The Granary, Trowse Bridge,  
Bracondale, Norwich NR1 2EG, England.

Tel: (0603) 630636

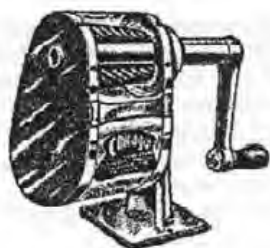
Fax: 0603 630374

Macintosh

# The Clip Art Stack



*Mr. Natural*



Pictures from The Clip Art Stack  
on the MacLibrary Disk 278  
HyperStacks 18. A very impressive  
collection of clip art with over 500  
items in one stack.

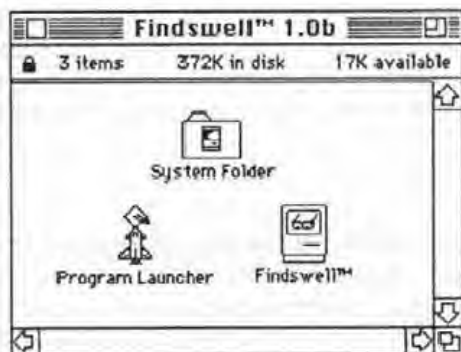




## Findswell for HFS

**Richard Wilday goes in search of his files!**

When Apple introduced their improved filing system HFS it solved a lot of problems but also brought with it some others. There seemed no end to the number of folders you could put within folders. An article in the last copy of *Macintosh Horizons* stated that Michael Wailman of Chicago's *The Rest of Us* achieved 132 deep nested folders and then he quit out of sheer boredom. By the way, 132 nested folders didn't add a solitary byte or K. With this large amount of folders it's not surprising that you start losing things. This is where programs like 'Findswell' (from the people that gave you 'Spellswell') become invaluable. Findswell works as an 'INIT', in other words you place it in the system folder and it installs itself automatically when you start the Macintosh.



There is no apparent difference to the display until you choose OPEN from the file menu. You are then presented with an extra button in the dialog box marked 'Findswell'. Clicking on this or pressing Command-F will activate a new dialog box. This allows you to search for an item either by Any Part, First Part or Full Name. With the first two options the more characters you can type, the more specific 'Findswell' will be in locating the item. 'Findswell' will then list all the programs, files or folders that fulfill the criteria you have set.

A useful feature is the window at the top of the box which displays the information usually found in 'Get info' together with a tree map of the highlighted item. The small box to the left of the documents name may be 'clicked' to allow the most frequently used documents to be displayed automatically each time 'Findswell' is used.

Although its primary benefits must be to those with a hard disk it will find a document from a collection of assorted disks, if you are prepared to search each one. To use 'Findswell' from the Desktop an additional program is supplied 'Findswell Launch Program', from which 'Findswell' will find and run programs.



### Conclusion

To sum-up there are quite a few of this type of program about, some of them are even public domain. Apple supply a similar one as a DA called 'Find File' with their new system, but it will not allow you to open a document from within its self, where 'Findswell' will. It hasn't the extra bells and whistles of a program like 'Disk Top', but I haven't found one to work as fast and as efficiently as 'Findswell' without bombing once. I shall be very reluctant to take it off my system. Available from MacEurope NOW.



The  
**MacEurope**  
Magic  
ToolBox™

MacEurope is a developer of professional publishing systems. Some of our best friends write wonderful productivity tools. We find them so useful (and we think you will, too) that we'd like to share them with you. For starters, look at these beauties. From Dave Johnson of Working Software Inc. in Monterey.



**With an oath,  
I clicked Find File  
for the 43rd time  
that morning.**

### Findswell™

Sick to death of slow, boring searches through your hard disk?  
Frustrated trailing through a maze of Folders?  
And having to use Find File again (and again) to remind you of the trail to your document.  
You need **Findswell** to Locate, then Open. Instantly. Directly.  
No going to the desktop. No folder fumbling. It's that simple. And foolproof.  
Remembers all previous searches.  
Works within any program.  
Stop wasting time. Bin Find File. Get **Findswell**. And cease that cursing for good.

£34.95

**Spellswell™** spell checker/proofreader. £49.95.

**Lookup™** checks as you type. £49.95.

**Medical and Legal Dictionaries.** £65.95 each.

If you don't agree our friends at Working Software produce wonderful software at fantastic prices, we'll eat the packaging. And you'll get your money back.

Stocked by MacEurope Dealers. If yours doesn't have stock, or you don't have a dealer, please call us. Literature, updates & support. From MacEurope. Of course.


Working Software distributed exclusively by MacEurope. Trademarks registered to Working Software. Magic Toolbox to MacEurope.

**MacEurope**

The Granary, Trowse Bridge,  
Bracondale, Norwich NR1 2EG, England.  
Tel: (0603) 630636  
Fax: 0603 630374

# Comic Strip Factory

**Some members get all the nice jobs !  
Michael Maloney and Mary Guillaume inspect this program.**

 The Comic Strip Factory v 1.5 with Comic People (hereinafter CSF) arrives on no fewer than 5 discs. The fact that these are single-sided discs immediately gives away the truth of the matter. Here is a new, well to these shores at least, program that will still run on the old 512K machine. (I hope that you 128K owners have stopped asking by now, after all even the 512K itself has been discontinued for almost 6 months.....) At the other end of the scale CSF bombed promptly under System 4.1 on a Macintosh II however it did function normally under multifinder. But, from here on in, we're running on the trusty 512K where the program behaved well.

I don't suppose that it is too difficult for you to guess what a CSF program does. You're right, CSF is a program for creating and assembling fully-fledged comic strips. And assembling is the right word, because the programs themselves (along with the System, Finder and Imagewriter Buffer) are all contained on 1 of the 5

floppies. The other 4 contain a large selection of CSF 'Parts Files' - ie bodies (gruesomely dismembered!) and the backgrounds to put them in. This concept has to be the strongest selling point of the package, and the one which the manual cover proclaims loudly (this is an American program after all). You don't need to be able to draw to be able to produce comic strips with this program. And that has to be a great relief to 99% of us - after all don't you find it embarrassing to have the world's most perfectly developed graphic micro computer on your desk and yet still not be able to draw?

But hold on, we're getting ahead of ourselves, didn't it just say program a few lines ago? Well yes; the CSF itself is naturally enough the main program, it acts as the final assembly point for all of the elements of your comic strip. The other application on the program disc though is Part Maker II, a compact 12K program which can convert Clip Art files (MacPaint format Clip Art files that is)

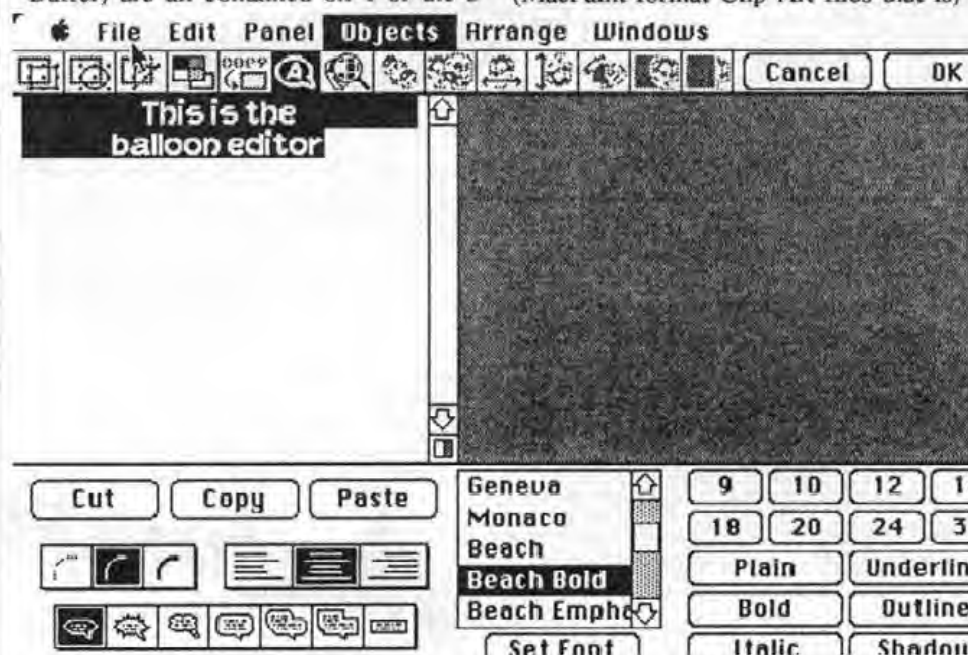
into still more CSF Parts files. The drawing skill quotient just keeps falling.

So, how does it all work? Well, surprisingly well. The concept is, considering the end result, surprisingly simple. Selecting 'New' or 'Open' from 'File' allows you to open up to 4 document types, several of which can appear on screen together although, of course, at any one time only 1 has an active window.

The first is a Comic Strip layout. The page onto which the comic is assembled. This defaults to an 8 panel page layout, ie 2 columns of 4 rows, but this can be adjusted to an almost infinite extent. Panels can have wide screen grandeur or they can be packed like sardines. They can be smooth and regular or rough and jagged. They can merge or overlap - whatever in fact your story requires.

The second is a Parts window. Parts documents consist of pictures of objects and the characters to use them - the props and actors of your comic strip. CSF allows you to import Parts files into the panels of your layout by a simple 'Copy to Panel' command. Parts files are always in MacPaint format, CSF works entirely in bit-map mode. There isn't even a Laserwriter Driver supplied on the System/Program disc. It is pre-drawn Parts files that fill most of the 4 other discs of this set. The props and character parts (heads, hands and feet etc) drawn by Trici Venola (of Mac the Knife fame) are quite excellent and can be used as the basis for many inventive strips. At least there are many inventive strips in the manual.

The third window labelled Text contains the comic strip's script. Text can be imported from a prepared text file - use 'Save As....Text Only' in MacWrite - and copied and pasted into the CSF as and when needed. Alternatively text may be created directly in the program itself. Naturally text in a comic must be placed in speech balloons and the Balloon Editor



**The Balloon Editor - for editing Balloons !**



# Macintosh

itself lets you create and add words to the whole gamut of speech balloon types found in conventional comic strips. Creating a balloon is easy; just select a shape and Cut, Copy and Paste it into place, add a pointer with 'Point Balloon' from 'Objects' and drag it to size. Adding text is similarly painless, with the additional benefit that CSF contains its own selection of comic compatible fonts. (Can you imagine Dennis the Menace speaking in, say, Times or Venice?!) Note, CSF is unprotected and can be run from a hard disc - thank you Foundation Publishing - but these special fonts reside not in the program (surely they could have) but in the supplied System file, they must therefore be Font/DAMover-ed across to your hard disc System before they can be used. Despite the fag involved this is well worth doing as the fonts themselves are excellent, especially the family of 4 Beach fonts - an informal sans serif whose lower case is particularly appealing. The fifth, Canyon, is an informal script face which although suffering, like all scripts, from the limited resolution imposed by the MacPaint/Imagewriter 72 dpi comes across well, certainly it is streets ahead of the Zapf Chancery screen font.

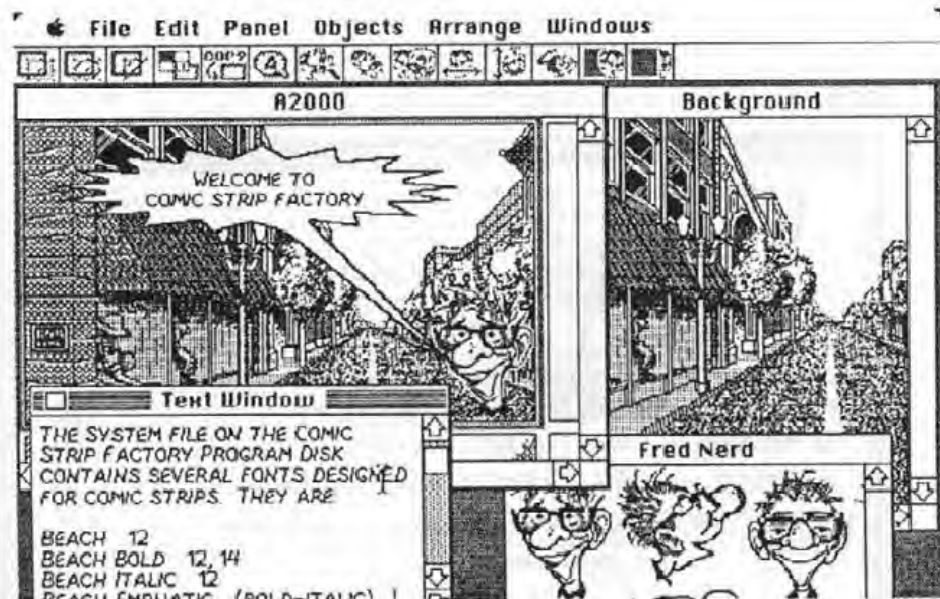
The final window type is for a large MacPainting which can be used as a Background to the action in several panels. Again CSF comes to the aid of the non-drawer with some excellent background work by Kurt Wahlner. To overcome the

sameness of shape for all work produced within the 10" x 8" MacPaint format CSF has adopted a novel solution which involves splitting the MacPaint page into horizontal strips which are then automatically reassembled into their original dimensions upon opening. This means for instance that the panorama of 'Main Street'....."somewhere in middle America", one of the supplied backgrounds, works out at a finished size of 24" x 3"; that's one heck of a scroll! Upon installing a new background a selection marquee pre-sized for the currently selected panel is displayed, the marquee can then be dragged around the background and the chosen portion Copied to the Panel.

Assembling the strip is made easier by the nice programming touch of an icon bar of 14 menu selection equivalent icons, which appears just below the menu bar itself. These add considerably to the overall feel and speed of use of the program.

So what else is good? Well the manual is. Witty yet informative and full of nice touches that give to the terminally non-artistic some basic tips on layout and composition. And the price is.....what more do you want?

ComicStrip Factory is available from MacLine for £55.00 + £2.50 P&P and the usual VAT. Comic People, a disk of Comic Strip Clip Art is £35 + £2.50 P&P and VAT



A general view of Comic Strip Factory in action.

## The MacEurope Magic ToolBox™

MacEurope doesn't bother with less than top quality products. When we started the memory market in the UK, we worked with the best. We believe there are some things you just don't economise on. (Would you fit a second-rate pacemaker, for example?) Intermittent crash systems and corrupt data. The best way to guard against these horrors is to fit Crash Proof memory from the market leader, MacMemory.



**When they said  
"Mac II for £449"  
I thought they  
were mad.**

But it's true! You can make your Mac SE run like a Mac II. And it will cost you just £449. Really clever design and advanced manufacturing techniques combine to make a MacMemory accelerator that's very fast and very economic. There's no compromise on quality and no crashes either. Because Turbo SE uses the same 68000 processor as your Mac, but twice as fast. That's smart. All the memory and all ROM routines run at the full 16MHz. That's smart too.

You'll hear hot air about 68020 accelerators, but the fact is Turbo SE keeps up with the fastest, is much better value, and won't crash on you. And isn't that what you really care about?

Stocked by MacEurope Dealers. If yours doesn't have stock, or you don't have a dealer, please call us.

Literature and solid advice. From MacEurope. Of course.

MacMemory distributed exclusively by MacEurope. Magic ToolBox trademark registered to MacEurope.



The Granary, Trowse Bridge,  
Bracondale, Norwich NR1 2EG, England.  
Tel: (0603) 630636  
Fax: 0603 630374

# MACSQZ!

## Michael OShaughnessy gives an in-depth review of this useful utility

(typeset by Irene Flaxman, using R S G 4)

So now you have created all those large Excel spreadsheets, but the only problem is that you always seem to have very little or no space left on your disks. An 800K disk seems plenty, until you start filling it with Excel spreadsheets and macros - then you end up with the dreaded disk shuffle. What do you do - take the pledge and give up Excel, or go out and buy a hard disk and proceed to fill that as well? I think anybody using Excel seriously must have encountered this problem at one time or another.

Well, Symantec (recognizing the problem) now have a program which helps to solve it, called MacSQZ! (Mac SQueueZe), which reduces the size of Excel files by considerable amounts. It consists of an INIT (MacSQZ! Init) which you install in the system folder, and a desk accessory (MacSQZ! DA) for changing the program options. After dragging the INIT into the system folder and installing the DA with Font/DA Mover you MUST RESTART the system in order for it to work. On the disk are a number of other programs - MacSQZ! Tools is a stand-alone program run from the desktop to customize MacSQZ! and display history records; Apple File Exchange, MacSQZ! Convert, Batch Squeezing, and Batch Unsqueezing - these four programs work together to convert existing Excel files to the MacSQZ! format and MacSQZ! files back to Excel format in a batch mode. It is also possible to convert Lotus 1-2-3 worksheets to the Mac for use with Excel. The disk also includes MacSQZ! Demo (an Excel worksheet) and a Font/DA Mover to install the MacSQZ! DA.

### Using the Program

The procedure for using MacSQZ! is as follows:

1. Open Excel, then select the

MacSQZ! DA in order to set the required parameters.

2. Choose the way you wish MacSQZ! to save the active file. It is possible to remove all Blank cells, specify the Formula Values, assign a Password to protect the file contents from other users, and Annotate to add extra comments to the files for future reference. WARNING: if you add a password, it is not displayed - so if you forget it there is no way you will be able to use that file again.

3. Close the DA and choose Save from the File menu. Instead of the usual Click, the cursor changes into a document which blinks from full-to half-size while the file is being saved. If this does not happen (i.e. the cursor turns into the normal clock) then something is wrong and the file is being saved as a normal Excel document - not as a MacSQZ! file. When the Save is complete, open the MacSQZ! DA and check that the box "Save as SQZ! file" has been selected - if not, just select it, reset the parameters and try again. If you now close the file and select Open from the File menu, the file title should now be displayed ending

with a "I". (NB: if you do not wish the original file to be over written choose Save As instead.) If you cannot remember how you set the parameters for a MacSQZ! file, select Open from the File menu, first select the file required, then the MacSQZ! DA, to display the parameters for the saved file. (NB: you cannot Double Click on the small MacSQZ! file icons on the desktop to open Excel - you must Double Click on the Excel icon.)

In order to use the Batch Squeezing or Batch Unsqueezing programs, the following programs must be present on the Disk - Apple File Exchange, MacSQZ! Convert and either the Batch Squeezing or the Batch Unsqueezing program.

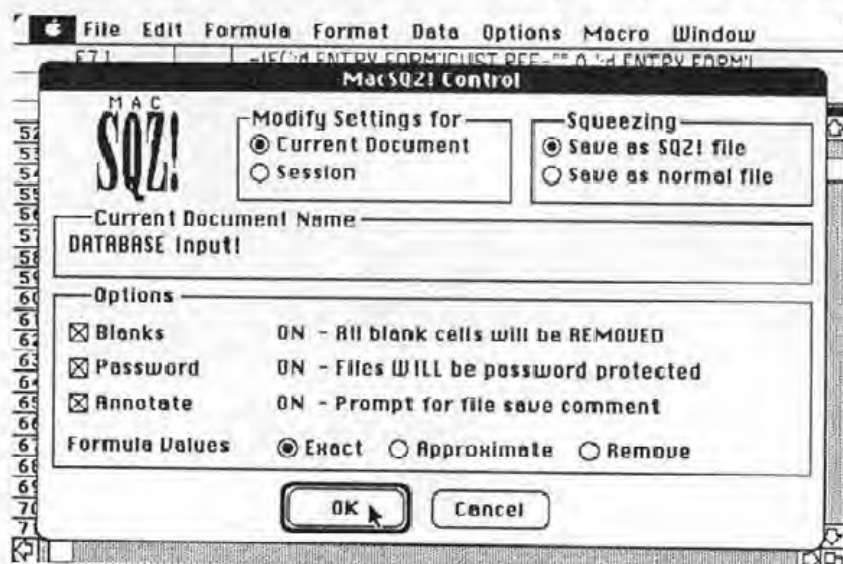
The procedure for using the Batch Squeezing is as follows:

1. Double Click on the Batch Squeezing icon, then click on the Drive button below the right-hand window. The Mac to Mac menu then appears in the menu bar.

2. Choose the Mac to Mac menu. This is a "tear-off" menu similar to HyperCard menus. At the top, it displays Excel to MacSQZ... and MacSQZ to Excel. Choose the desired function to convert to or from Excel, and this will be indicated by a tick on the left. If the Excel to MacSQZ etc. is missing then the MacSQZ! Convert program is not present on the disk, so Quit the program and place the MacSQZ! Convert program on the Disk before trying again.

3. Selecting Show Only Eligible Files from the File menu dims the non-Excel or non-MacSQZ! files, depending on the setting of the Mac to Mac menu.

4. Double Clicking on the Excel to MacSQZ... option in the Mac to



Mac SQZ! Control Settings



Mac menu displays the Batch Squeezing Options menu. The Blanks and Formula Values parameters can now be selected as required and then the menu can be closed again.

5. Select the files or folders to be converted and then click the Translate button to start. (NB: Check the direction of arrowheads BEFORE clicking the Translate button, as it is too late afterwards.)

6. The conversion is complete when the cursor changes back to an arrow instead of the document which blinks from full- to half-size while the file is being converted.

7. Select Quit from the File menu to exit from the conversion program.

## Testing the Program

Tests were carried out using a Mac Plus with 1Mbyte memory, External Disk drive, System B1-4.0 Finder B1-5.4 and Excel V.1.04.

The 7 different files used for testing MacSQZ! are described below:-

Files 1 and 2 were Spreadsheets (small - medium) organized as entry forms with many blank cells.

Files 3 and 4 were large Spreadsheets (1000 cells - 1500 cells) which had many cells to calculate and also formatted the output.

Files 5 and 6 were Macros (small - large) with relatively few blank cells.

File 7 was a Spreadsheet organized in rows as a Database with a considerable number of blank cells.

These files were chosen as a typical cross-section of the types of files normally generated by users.

The original Excel files were copied onto 6 different disks in order to

COMPARISON OF EXCEL FILE SIZES BEFORE AND AFTER USING MacSQZ

FILE TYPES	Spreadsheet small		Spreadsheet 1000 cells		Macro small		Database	Disk Space	
	small	medium	1000 cells	1500 cells	small	Large		used	available
Excel:- NORMAL	5	45	129	168	15	47	82	507	278
MacSQZ									
Blank cells:- STORED	4	39	99	120	10	40	44	364	422
Formula Values:- EXACT	4	38	96	114	9	36	43	355	427
Blank cells:- STORED	4	39	94	112	10	40	43	347	435
Formula Values:- REMOVE	4	39	94	112	10	40	43	347	435
Blank cells:- REMOVED	2	31	76	76	9	36	42	280	505
Formula Values:- EXACT	2	30	72	71	8	32	40	265	520
Blank cells:- REMOVED	2	31	70	68	9	36	41	265	520
Formula Values:- REMOVE	2	31	70	68	9	36	41	265	520

MacSQZ! Size Comparisons

facilitate the testing, one for each different combination of the parameters: Blank Cells and Formula Values. The Excel files were opened and then saved with the new MacSQZ! file replacing the original of the same name. The resulting MacSQZ! files were opened and checked to see if any adverse results had occurred as a result of the compression.

When the Blank Cells were Stored then apparently no direct discernible problems were observed. However, when the Blank Cells were Removed different results were observed - e.g. in the entry forms blank cells remained but lost any boxes around them, while in the larger files (1000 cells and 1500 cells) the box showed 100% but the program became confused whilst trying put back the missing blank cells and the system had to be restarted.

So before using the program for all your files, take a typical spreadsheet you have created and save it then re-open the resulting MacSQZ! file to check everything is OK. Repeat the process, compressing the file further and further, using the order shown

in the table, until you find the optimum setting (i.e. the maximum compression without any corruption of data). This setting can then be used as your standard for using MacSQZ!

The table shows the results of saving the different files with varying parameters and also the total disk space used and available after saving the files. As can be seen from the table, the difference between the amount of disk space used and available (for the original Excel files) reverses after using MacSQZ! to save the most compressed version. Even with the Blank Cells option set to Stored considerable disk space can be reclaimed.

## Conclusions

The MacSQZ! program does what it sets out to do - i.e. compress Excel files by considerable amounts. It is easy to learn and use, and it should pay for its self in a relatively short time by reducing the amount of disks required.

On a hard disk, the results should be a better usage of the disk's capacity, resulting in a less frequent need to delete files from the disk.

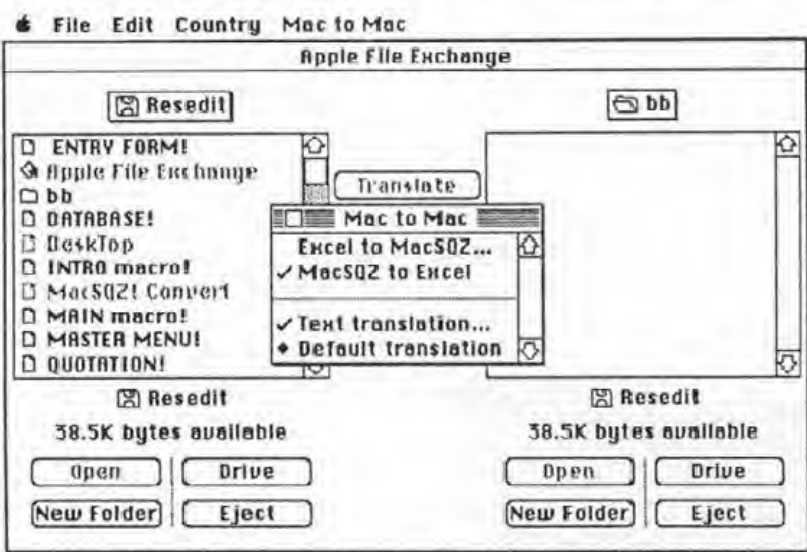
The documentation is clear and concise, both in the manual and in the file on disk containing the up-to-date changes and corrections.

Considering the prices of disks, both floppy and hard, then the program is quite reasonably priced.

The program is not Copy Protected, which makes it easy to install.

In all, a serious program which Excel Power Users should find useful in their day-to-day work.

Price £65.00  
The MacSerious Company  
17 Park Circus Place  
Glasgow G3 6AH  
Tel. 041-332-5622



MacSQZ! Batch Unsqueezing

# MacWorld

## Dave and Irene Flaxman visited the MacWorld Expo. in San Francisco - the biggest yet!

Once again, we visited MacWorld as part of our annual holiday, and we are happy to report on the expo. However, we feel that we must clear a misconception that seems to be prevalent in the Group, relating to the source of funds to finance such trips. All funds for our visits to MacWorld in America (of which there have been four to date) have been provided by ourselves, from our personal resources. At no time have we asked for, nor expected, a contribution from Apple2000.

We visited MacWorld, at the Moscone Centre in San Francisco, for four days in all. The expo was open to the public for three days, but there was a preview day for business contacts, which we were also invited to attend.

The size of the expo was noticeably larger than last year - then, only half the Centre was used for MacWorld, with a Boat Show taking place simultaneously. This year, MacWorld took up the whole - and we are assured that next year's will be split between two venues, as there does not appear to be a single venue which will be large enough to accommodate the whole show. Incidentally, the same is true of the Boston expo. - exhibitors have been asked to indicate at which venue they wish to book space. How many visited the Expo? The last estimate we heard was that 50,000 members of the general public were there and we can well believe it, because it was really packed! Although the entrance fees are quite high, they do allow entry for all three days of the expo. It was

interesting that this was the first expo, which was open on a Sunday, which the Americans felt would never happen!

Nigel Strudwick gave an overview of the expo last month - looking at the event from the point-of-view of a member of the public. We were able to attend some of the presentations of new products, including the launch of the LaserWriter II range, Appleshare PC, and the MIDI interface from Apple.

The keynote speech from **John Scully** was interesting - I have to admit that I was impressed, as the man did not read his speech (we were close enough to know this), but the speech lasted about thirty minutes, and he did not hesitate once! The auditorium was packed, and there was some disturbance outside the doors, as more people tried to enter - the security staff had difficulty in keeping them out! He presented an interesting view of the future - the Knowledge Navigator was introduced as being Apple's view of computers to come. This was a video presentation of a new concept in computer technology. The cpu was the size of the well-known Filofax diary, but opened with the familiar Macintosh sound. Two-way audio communication was possible, between the Mac's owner and the Mac itself. The machine intercepted telephone calls, took messages, made telephone calls and left messages - much as any good secretary would do. The video was very much "tongue-in-cheek", but it left you wondering . . . ?

The joint announcement by **Apple** and **DEC**, that the two companies would be combining their resources for joint development of networking products, was very well received. Admittedly, DEC made similar announcements in respect of other companies, but it was still seen as

being a great step forward. We were assured that there was no intention that one company should take over the other - rather, they will each develop their own product ranges independently.

Quite apart from the expo, we were interested to read any press coverage given to Apple and their products. One news item reported in the general press referred to a tussle between Apple and the Internal Revenue Service. Apparently, the IRS have started a campaign of checking up on many of the companies in "Silicon Valley". They had checked back through three years' Apple accounts, and had presented a bill for back-tax amounting to \$85,000,000. This amount related to the years 1981, 1982 and 1983 - so there may be more to come? Apple are contesting the tax demand. (Source: San Jose Mercury News - Wednesday, January 20th).

In the past, we've seen DeskTop Publishing and DeskTop Communications, now the latest idea is DeskTop Presentations. Everyone has suddenly realised just what a large market there is, waiting for the tools to make presentation preparation easier. What better starting-point could there be, but the Macintosh? A number of companies have been working in conjunction with Apple to develop new products which will attack this sector of the market, and MacWorld provided the ideal stage for the launch of such products. Amongst them were Kodak, Microsoft, Genigraphics, IDD, Olduvai and Cricket.

Having seen the presentation of the **Kodak** LCD Display Panel, we were impressed. A card is inserted into your Mac (Plus or SE), a hole has to be cut into the back of the Mac, to allow the attachment of the display panel, then the panel is placed onto an overhead projector (up to ten feet away from the Mac). As you use the Macintosh, the screen display is echoed onto the LCD display panel, and thence (via the overhead projector) projected onto a large screen. Currently, there is no Mac II version, and colour is not supported, but the display is true black-and-white, and provides a useful tool for presentations to a fairly large audience. We asked about availability and pricing in the UK - and met the usual answer. The product will be launched in the States in April 1988, with the worldwide launch a few weeks later.





# TRAVEL



The price in the States is \$1495 + \$99 for the card, but no indication was given of prices elsewhere. One disturbing thing was that there had apparently been close liaison between Apple and Kodak during development, but a question as to whether the opening of the Mac etc. would invalidate the warranty was left unanswered - the representative from Apple didn't seem to know! Obviously, this is expected to be a strong market, as we saw several products of a similar nature at the expo - but none were launched as forcibly as the Kodak version.

**Cricket Software** gave an imaginative presentation of their new products, again aimed at the Desktop Presentations market. The first was Cricket Presents, which is a program for producing colour slides for presentations in as short a time as possible. This was a medium popular with other developers, too. Using the Mac to create colour slides is an obvious use for the machine's excellent graphics capabilities, particularly using the colour capabilities of the Mac II. Their new Cricket Paint program looked very impressive, although it is not yet complete. There were some very nice new features, in addition to the usual standard facilities we have come to expect in Paint-type programs.

**Microsoft** acquired PowerPoint in 1987 and have developed it since then, with a view to entering the Desktop Presentations market themselves. They launched their new product in conjunction with **Genigraphics**, one of the largest companies in the States in the field of preparing presentation graphics. Their speciality is the production of 35mm colour slides for their clients - the individual clients are then able to give their presentation in style and with confidence. The two companies are undertaking a joint venture to

offer a service for clients to decide at what stage they need to bring in the expert assistance of Genigraphics. I have not heard of any similar company in this country, so it may be that there is a niche there for some enterprising person?

**IDD** were presenting their new program, Dreams. This is the company that launched MacDraft, and there is an upgrade path from MacDraft to Dreams. Their stated aim is to provide powerful easy-to-use CAD tools for all. Dreams is a CAD package, and looks very powerful. The company see the CAD market as having three ranges - the lower-end entry level programs at around \$200; the mid-range programs at around \$500; the high-end programs at around \$2000. Dreams is marketed in the mid-range, at \$500 (or \$200 to upgrade from MacDraft). The tools are organised in levels of menu - starting simply, the facilities become more powerful and more complex as you delve deeper into the menus. Palettes can be changed, e.g. to create (or import) new patterns for use in your drafting, and you can work in several 'layers', dependant on the available memory.

**Olduvai** have featured in a previous issue of the magazine, when we reviewed their Post-ART library of graphics. They introduced five new products at the expo. - FontShare allows downloadable PostScript fonts to be shared by all the Macs on a network; ADBridge allows the use of the

the new desktop bus with a Mac 512E or Mac Plus, and allows the use of the Mac SE and Mac II with peripherals designed for the 512E and Plus; DA-Switcher // allows you to work with multiple desk accessories, and there's a free upgrade for registered owners of the original utility; Post-ART II includes more full-page PostScript illustrations by J Ciccone; and Icon-It! Runtime allows the use of icons in menu bars. They also demonstrated their LaserAccelerator and Memory Expansion board for the LaserWriter, and READ-IT! OCR software for use with any scanner (there's a separate product for the Thunderscan), which allows any graphics scanner to import text with remarkable accuracy. As we stated in our previous article about this company, we liked the people - they are enthusiastic, and they seem determined to bring good, useful products to the market at reasonable prices.

**Silicon Beach Software, Inc.** introduced Digital Darkroom, an image-enhancement program which imports and exports files in PICT, PICT-2, TIFF, MacPaint, SuperPaint, and Thunderscan formats. It features an "Auto Trace" option for translating bit mapped images into a draw environment outline, and will run on a Mac 512E, Plus, SE, or II computer although 1 Mbyte of RAM and a hard disk are recommended. The program should be available later in the first quarter and sell for \$295 (no UK prices at this time).

**CE Software** have a new product in the pipeline. Their method of introduction was a bit different - they had a competition to name "Product X". These are the people who brought us the "mock" packages, QuickKeys, and other useful utilities, so it should be worth waiting for.

Apple's new software company,



**Claris**, made their first appearance, with the upgrades for the staple Apple products - MacWrite, MacPaint, MacDraw, etc. There is an upgrade path for current users, but there were no details so far as the European market was concerned - either of availability or of distributors. It's vital that Claris upgrade their products, when you consider how much competition they now have to contend with, and the facilities which have been added to the later-developed products.

**Emerald City Software** was a name new to us, but their LaserTalk software interested us. It is described as a PostScript development environment for serious PostScript developers and desktop publishers. Amongst its features are interactive access to the LaserWriter's PostScript interpreter over Appletalk, an on-screen preview window and on-line operator descriptions from the PostScript Language Reference Manual.

**LaserWare, Inc.** were demonstrating the latest version of their LaserPaint program, which now includes automatic 4-colour process separations using the Pantone Matching System - the program will create the four separation prints, including registration marks on each, and indicating which colour the printer should use with each separation.

**Adobe** were showing Display PostScript, as Nigel said, but they were also showing Illustrator 88. The new version (which is due for release shortly) provides some new features, and the colour options were being demonstrated in conjunction with the new colour printers. I have always liked Illustrator, but the new features promise more power - one of the most impressive being the ability to place two images of similar shape (the example being demonstrated used the letter "S" and an outline sketch of a swan), and the program can then create the intermediate graphics to "convert" one image to the other. Potential buyers in the States were advised that, if they purchase Illustrator now, there will be no charge for the upgrade to Illustrator 88 when it is available - an obvious answer to prevent the deferment of purchases, but effective. We were not advised whether the same offer would be available in Europe.

Colour was definitely one of the highlights of the show, with colour

displays, colour printers, and even a colour scanner from **Sharp**. It is a commodity which has to be paid for, though - the prices are high. **Bill Bates** (of JustText fame), and **Mike Saenz** have jointly developed a colour desktop publishing system called Lithographer. The initial publication produced by the system is a "graphic novel" Iron Man (reminiscent of the cartoon books of our youth). Mike was showing an incomplete version at Boston, where it raised a great deal of interest, and the final version looks good - but the price is high, it is for the professional market.

**Dayna Communications, Inc.** were showing DaynaFile, their range of the external disk drives for the Mac which will read from and write to MS-DOS data disks. This may be the ideal solution for those of us who are forced to use IBM or compatibles at the office, but prefer our Macs at home - there may be times, though, when we need to bring that work home! The drives come as one- or two-drive units, and you can even specify what formats you want for each drive - e.g. 5.25" (360K), 3.5" (720K).

The user groups were well-represented, including **BMUG**, **BCS** and **Apda**. They are encouraged by Apple, although they retain their independence - e.g. BMUG and BCS feature in all Apple's user manuals. We called in to a meeting of the Los Angeles Macintosh Users Group during our stay. Although it is regarded as a "local" group, there were around 400 members at the meeting we attended - and that appeared to be quite usual!

One unusual exhibit at a computer expo was a **Buick** automobile. The purpose of the exhibit was to demonstrate a new service to potential customers - it is now possible to obtain a Mac disk with all the details of the car of your choice. This enables you to decide what features you require, how much it will cost, etc. This just adds emphasis to the fact that the Macintosh is seen as a powerful business machine in the States - its image is entirely different to the low profile it is given in this country.

So many products were on display without offering immediate availability, and sometimes the waiting becomes too long. Even when these new products appear for sale in the States, we may still find that we have to wait for some time before they are available

to us - if they ever come over. We met some of the UK distributors at the show, and it was interesting to guess who was chasing what - but nobody was giving away any secrets, so we shall just have to be patient until announcements are made.

We met a number of Europeans who had gone over to the expo - either for interest, or to find distributors for their new products. They were surprised by the size of the event, and the different attitude to the market in the States - it requires an entirely different approach to marketing strategy. We were pleased to find these people going over, and made some new "local" contacts.

We enjoyed our trip, but we were disappointed in some ways, as there were few new products which really interested us, and we found that many items which were being "introduced" were those which we had previously seen at other shows, but for which the development time has been extended - examples being Ready Set Go 4 and FullWrite. In some cases, it has reached a stage where such "new" products are being taken over by the larger companies, who will complete the development and thereby enter a new field at a fraction of the cost that would otherwise be incurred.

Most of the new products were hardware, rather than software, and many were catering for the Macintosh II - and very pricey. This is only to be expected, I suppose, but it left us wondering what would be happening for the old Mac Pluses in a year or two?

There is no doubt about it, though - there is nothing like this event in the UK. The Mac is so strong in the States that the MacWorld Expo is a staggering event. So much so, that there are to be three next year - with Washington being added to Boston and San Francisco as the annual venues.





## AFFINIFILE

**Tom Wright plays with this D.A. and is now saving to purchase it!**

AFFINIFILE is a desk accessory (by Marsh Gosnell, Sharon Aker, and Affinity Microsystems) which provides Mac users with a dynamic filing system. The program package includes an 800k disk which carries Finder 5.5, System 4.1, and Affinifile. According to the manual if you do not have an 800k drive you can drag the four visible files onto 400k disks. Affinifile will work on Mac 512E, Mac Plus, Mac SE, and Mac II, and is said to be compatible with Finder 5.3/System 3.2 or Finder 5.5/System 4.1.

Before saying anything else, if my comments about Affinifile sound a little over enthusiastic please bear with me, I am new to Macintosh and haven't encountered a facility like Affinifile before (if there are others). When I first looked at the program I wondered if I would find it as apparently useful as Hypercard, my answer to that is now 'no contest' for the type and size of applications for which Affinifile is suitable. The immediate availability of Affinifile from the Apple menu scores heavily and the fact that Affinifile can handle graphics as well as various types of text manipulation makes it quite powerful. If you have been looking for a database facility complete with the ability to cross reference topics which can be available from the Apple menu then take a look at Affinifile.

When in use Affinifile produces a display similar to the following :



Information is stored as "Topics" and "Subtopics" each topic being capable of holding up to 5,000 words of text in the scrolling notes window, or if you want to count it as characters you have 32,000 per topic.

In the example above "Telephone Numbers" has been selected as the active topic in the top notes window, with the title of the notes topic being displayed above the notes window on the right hand side. The selected topic is further highlighted by being shown in inverse characters in the left hand side window. The other topic shown in the topic window has been cross-referenced to "telephone Numbers", the ability to cross reference data is a very useful feature of Affinifile.



Twenty one commands are available from within the Affinifile 'diamond' which appears in the menu bar whenever Affinifile is selected from the Apple menu. Among the commands available are :

**FIND** - There is an excellent "Find" facility in the program which is capable of finding entries from a search key of one or two characters if required, the "Find" facility can be used in either of the notes windows as well as being used on topics or notes.

**PRINT** - hardcopy from either a section of the current document or the whole document. The graphic images associated with a document can also be printed out. **ALIAS LINK** - provides a method of presenting identical information under different names in the topics list, both text and graphics can be linked.

**CROSS REFERENCE** - between the selected topic and other topics and subtopics (as in the above example).

**CHANGE** - selected topic name or

status, you can change spelling or add a date, change a subtopic into a topic, or a topic into a subtopic.

**SHOW GRAPHIC** - topics which have accompanying graphics are shown underlined as in the example above. Affinifile includes a set of demonstration graphics examples of which are shown below, other graphics can be imported via the clipboard. (The graphics examples provided with Affinifile are by courtesy of Miles Computing, the examples are from "Mac the Knife Volume 5, People, Places, and Things")

**COMPARE** - the current topic with the previously selected one.

**DATE STAMP** - can be used to name a topic or subtopic with the current date.

**TIME STAMP** - can be entered into either the notes or topics window using a twenty four hour clock format.

**RESIZE UP/DOWN** - UP makes the "see also" window larger, DOWN resets window sizes so that the topic area is largest.

**MERGE** - enables the user to merge files which have been created under Affinifile, there is a choice between merging selected parts of files and complete files.

**IMPORT/EXPORT** - text files can be imported to Affinifile and files created under Affinifile can be exported for other applications as text files.



Since receiving Affinifile for review I have grown used to having information "on tap" and have been very impressed with both ease and speed of use. The range of applications which would benefit from the presence of Affinifile appears to be considerable, from the simple telephone numbers and addresses example above through other business related files (prices, specifications, appointments, etc), not forgetting the fun uses to which it can be put. "Boilerplate" use for frequently used text is another application for which Affinifile appears suitable.

We are grateful for supply of the review copy of Affinifile which is recommended to all members (I am sorry to see it go and shall have to start saving the pennies for it).



# Mind and Computer

by Bill Pearce

This dissertation begins with the assumption that maybe in a computer we have a passable imitation of the human mind, at least as regards thinking, reasoning, decision making etc. The computer can of course be made to simulate moods and emotions, but to what purpose? We don't employ computers to do our living for us.

This fact itself identifies a great difference which I shall write off as 'true but trivial'. If it can't feel like we do, this in itself does not rule out the possibility that it can perhaps think like we do. This is the proposition I wish to pursue at length.

I begin by describing two opposing and exaggerated views :-

The computerphile who sees the microprocessor as a huge improvement on the stumbling, forgetful brain that gets facts wrong, calculations wrong, overlooks vitally important factors at a crucial moment and so on.

The computerphobe who sees the microprocessor as a blinkered, dogmatic, unimaginative monster that will happily accept that black is white if it is told so.

From this thumb-nail scenario a distinction is beginning to emerge. Certain tasks are ideal for computers. The storing and retrieving of information in a database is the best example. Word processors, graphics design, spreadsheets follow, probably in that order. A spreadsheet can begin to strain a computer's usefulness to the limit. But in all these areas the advantages are with the computer. It handles huge masses of data with great speed and accuracy. The human mind cannot begin to compete on either count.

Anyone who writes programs or undertakes systems analysis soon realises that this says it all. Once we enter the field of decision-making the pendulum begins to swing the other way. Typically, decisions can depend on :-

- multiple factors which may change daily and may not be predefinable
- experience of the likely consequences of decisions in that field

On the face of it, the computer can perform any task asked of it. This may be true. But there are practical limitations. Let us first look at *how* a computer makes a decision.

## Computer decisions

However many factors we ask the computer to consider of whatever type, the final decision and indeed every decision *en route* to the final decision reduces to the question "Is A  $\geq$  B?". A and B refer of course to variable quantities, not to the letters of the alphabet.

Whether all human decisions can be similarly reduced is beside the point because, as I hope to show later, human decisions can take account of factors which are either too complex to be worth feeding into the computer, or factors which by their very nature cannot be fed in. There would not be much point for instance in asking a computer which of two pictures it preferred, or even asking it to predict which picture YOU might prefer.

At each step in its decision making, the computer methodically and rapidly checks every condition that the programmer has put in the program. The more sophisticated programs allow the computer to modify its decisions in the light of the consequences of earlier decisions. This may sound impressive but the limitation is essentially the same, the conditions are still limited to those foreseen by the programmer.

My thesis is this - the computer does not decide anything, it looks up (or calculates) the appropriate course of action according to the rules specified by the program.

Here is the same thesis in different terms. As we learn about computers, binary and hexadecimal numbers, gates, bits, bytes, registers, shifts, buses, etc. etc., somewhere along the road we can forget that we are dealing with nothing more than Blackpool Illuminations packed in a box. No-one would dream of accusing Blackpool Lights of thinking. The jargon and the mystique disguise the simple fact - the computer is a box of switches.

I propose to look in greater detail at three areas that illustrate the kind of problem I am describing. The areas are timetables and rotas, picture recognition and finally multilingual translation.

## Timetables and Rotas

In the early days of mainframe computers several attempts were made to get the computer to write a timetable. The results were somewhat predictable. If they ever produced a timetable at all, it was unsuitable and would have been more quickly produced without a computer. No doubt the reader can guess some of the reasons for this failure.

Programmers are still trying to do the same thing on minicomputers. On the one hand the teacher underestimates the complexity of the decisions he has to make. I do not believe he can identify beforehand all the conditions he will apply as the timetable develops. On the other hand the programmer, who may well not be a teacher, accepts that the task is as simple as the teacher thinks it is.

My answer to the problem was to provide what is in effect an electronic pegboard. Data entered on a class timetable is automatically transferred to the correct



staff timetable and vice versa. Resources can never be double-booked so mistakes are impossible. An option facility allows option groups, modules and setting. The computer gives maximum electronic backup *but makes none of the decisions*. Those who use it find it incredibly simple to understand. Those who have used other systems are impressed with the fact that a completed timetable remains just as editable as a blank one. Yet I meet many doubting teachers who are convinced the computer could give much more help. They are of course looking at only one small part of the entire operation. They know that it is quite possible for the program to be told e.g.

- that class X is always in room Y (except when A,B,C,D . . .)
- that Miss C is always in room Z (except when P,Q,R,S . . .)
- that Mr. A is available only W, Th, Fr mornings
- that no class should have Music after Games
- that there must always be one of the listed staff in one of the listed rooms (probably several of these lists)
- the listed staff must not take any of the listed classes
- one of the listed staff must always be free
- all the listed staff must be available together at least once
- all the listed classes must have at least one morning period in each of the listed subjects
- all the listed subjects must be given at least one double period with every class
- all First Year classes must have one period of French every day

This is a ridiculously short list of a few reasonable requirements. Any teacher can double, treble, quadruple the list without effort.

Let us suppose that we decide to let the program attend to these matters for us. (In fact the analytical approach would require much more than this - e.g. exactly how many periods of each subject should each class have, what subjects does each teacher offer and to what level, how many periods of each, how many frees, ideal distribution of periods for classes/teachers etc.)

Before any work on the timetables begins, all this preliminary data has to be entered. The manual has to explain how this can be done, and how it can be undone. Once these preliminaries are over the teacher (or the program) may start entering actual bookings and reaps the benefit of the spade work, UNTIL one or other of the conditions changes. This can happen at any time during the currency of the timetable and even during the compilation period. This is one of the worst drawbacks to the analytical timetable: you cannot just repair the roof, you must dig up the foundations. A teacher can be excused for not seeing the problem, but a programmer should spot it at once.

That is not the full story of the drawbacks to asking the computer to check these conditions, however few and however simple. Every condition imposes another straitjacket; this may not worry the programmer but it does the user.

I am using analytical to mean a program that has been given information about some of the conditions to check. My approach I describe as synthetic, where the computer knows nothing except the actual bookings inserted.

I classed Rotas along with Timetables. Although a rota program must operate in a totally different way (we are not looking for clashes, we are checking for hours worked in conjunction with manning levels, where staff qualifications and/or grades are a significant factor) the total task clearly divides into two distinct types of operation -

1. The purely mechanical totaling of hours, number of bookings of each grade for each day etc.
2. The complex decision-making where the conditions to be met are almost infinitely variable.

Again I personally give a pegboard answer. The resulting program is simple to understand and operate, the rota remains editable from start to finish.

### Picture recognition

Let us feed two identical pictures into a computer. To the computer of course each picture is a series of numbers. Get the computer to compare them. The computer would confirm in a matter of seconds that the pictures were identical. Ask a person to compare them. The person would spot the overall similarity instantly but would never be able to confirm that they were identical in every detail. "SPOT THE DIFFERENCES" is a popular pastime.

Let us now shift one of the pictures one pixel (smallest picture element) to the left. It would be a very clever program that could recognize any similarity between the two pictures. It is no use saying that a simple bit shift solves the problem. How does either the programmer or the program know which bit shift to try, or how many. Then change the size of the picture, or its perspective. Each of these simple changes plays havoc with the numbers stored in the computer. Yet none of these changes makes any difference to the human, who continues to spot the similarity instantly.

If you are still desperately trying to get the computer to reconstitute the picture, I shall print it on a flag and let it flutter in the breeze! I believe this example illustrates as well as any the difference in *modus operandi* between mind and computer. The mind is not exact, can overlook important factors, forget details, but it gets the overall picture at a glance.

### Multilingual translation

This next example takes us well into the realm of so-called artificial intelligence. In passing I would comment that at last the computer makes it possible to produce a dictionary that is not out of date long before it is published. Whether the publishers have taken advantage of this facility I cannot say. But as for live ad hoc translation! This is the computer equivalent of walking through quicksand. Even if we ignore the fact that language is constantly changing, which has always made large dictionaries out-of-date before they were off the press, the complexities of how context affects meaning, the subtle ways in which different connotations of a word can be brought out, the distortions brought about by sarcasm or humour - all these factors militate against a computer ever doing more than make a travesty of translation. The problem is similar to the problem of picture recognition. The computer can only work literally and according to rule. The programmer teaches the computer a whole battery of tricks to help it to recognise idioms, sarcasm, humour and so on. But just as it cannot

take in the whole contour of a picture at one fell swoop, neither can it assess the import of the full context at one fell swoop. Programmers currently imagine that selective word checking will provide the solution, on the assumption that this is how the human mind solves the problem. This method certainly enables the computer to churn out gibberish far more quickly.

The language translation programs, to be anything like competent, will need an army of expert programmers and expert linguists to maintain them until they eventually seize up with the mass of indigestible code. They are the white elephants of the computer world and I anticipate the search for artificial intelligence is destined to produce quite a crop (or is it a herd) of white elephants.

Here is a further illustration of the amazing power of the mind to arrive at a complex decision without going through a step by step check. Let us suppose our computer has a spelling checker and that you, as a representative of a human mind, are a good speller. Both you and the computer are presented with a list of twenty words, one of which is an English word which is in the checker, and the remaining words are all foreign words that do not resemble English words. The task is to identify the English word. Now I am not interested in how fast you do it. The chances are you will beat the computer. But a faster processor and a better search method might enable the computer to beat you.

OPERATION	COMPUTER	MIND
PERCEPTION	Accepts any numerical input but rigidly prioritised Monitors system variables similarly All predetermined	Accepts all sensory data globally, flexibly prioritised according to the situation Monitors internal state similarly
RECOGNITION	Search and compare Mostly 100% sure May fail to detect complex mutation	Instantaneous but may fail or be false Can follow very complex mutation
RECALL	By search or by direct pointer 100% sure	Mostly reliable but may fail or be false
CALCULATION	Accurate to specified limits	Unreliable - best left to fingers, abacus, calculator or even a computer

The question is - How did you do it? We know exactly how the computer did it. We (humans) wrote the program. It compared each word in the list to as many words as necessary, depending on the search technique used, in order to establish whether or not the word was in the spelling checker. Now how did you do it? Did you mentally run through all the words you could think of, painstakingly comparing letter by letter (which is how a computer compares words)? Or did you recognize the English word as soon as you saw it?

Even if the computer has had the target word in memory a million times before, it will never recognise it. It will blindly compare each search word with each check word and they all come and go as strangers.

I do not offer any explanation of how this instant matching operates, though it is discussed in a later essay. There is no conceivable way in which computers as we

know them could emulate this feat. I think it may be worth noting that the computer recognition process would not have much survival value in a real-life emergency! Only a global perception of the whole situation gives sufficient data at a stroke for immediate effective responses. A human with a computer for a brain would perish before he could react to adverse conditions. He could burn to death while his computer was busy checking that he was not drowning. The 'artificial intelligence' we seek bears no resemblance to real intelligence. Its decisions are all "look-up" decisions. Intelligence implies finding new solutions to new problems. All solutions produced by a computer are tautologies: they are implicit in the rules we gave it. The computer itself cannot produce a valid rule. (It *can*, but a human would have to verify it!)

### Mind imitates computer

There are several tricks that the mind can employ to "improve the memory". First they make use of the facility we have for forming associations. If this facility is combined with any trick for bringing up an ordered sequence of data (which is what computers do so admirably) e.g. by simply numbering the pictures we wish to recall, we get the illusion of improving our memory. These tricks do have their uses and can be invaluable to a public speaker. The speaker can thus easily ensure that all the points are made and in the correct order. One problem that occurs with this technique is that whereas the computer can wipe the slate clean and start again, the mind carries the debris from earlier exercises and interference takes place.

### Computer imitates mind (i.e. artificial intelligence)

Serious attempts to teach the computer to ape human thinking are attempting an impossible task. The computer does not have the wherewithal to formulate an instantaneous global view of any situation. This global view must not be confused with a hit-or-miss selective view. We do not have a hazy, partial or selective view of a picture, we have an instant perception of the whole picture, taking in the relation of parts to the whole and to one another. The computer cannot have a similar perception. At any given millisecond it is contemplating one bit of one byte and has forgotten all about the previous bit. The mind instantly recognises words while conversing or reading, selecting suitable connotations in full flight. The computer has to conduct progressively more complex searches in order to simulate recognition. I return to the theme of instant recognition in another dissertation.

The Apple Macintosh with its hierarchical system of pointers and hierarchical filing system would appear to imitate to a degree the mind's facility for organising its operations. Bill Atkinson's 'Hypercard' team make much of the mind's ability to associate ideas. They do not however make the mistake of claiming that the computer can make sensible associations. Hypercard allows *you* to make them. One of the 'Help' pages points out that the computer is not intelligent. The incredible ability of the mind to create direct-access pointers to every single concept, simple or complex, that it bothers to file at all, linking it intelligibly with the existing structures, has no parallel in any mechanism outside living organisms. It is thought that it does all this filing while we are asleep. Perhaps that is why we cannot understand the system!



## Respect for numbers

I have thus far made nothing of the fact that a computer sees everything in terms of numbers. That of itself is no grounds for denying its right to be classed as a thinking machine. One can only marvel that such clever representations of events in time and space can be built out of a one-dimensional series of numbers. We tend to associate numbers with intellectual activity and are easily induced to think that a machine which deals exclusively and expertly with numbers could well be thinking, or as near as makes no difference.

But note that the difference between human and computer perceptions as identified earlier in the picture recognition and word recognition tests is not merely a difference of degree, it is a difference in kind. Selective sampling techniques do not imitate instantaneous global perception, they introduce a random element which can totally invalidate the perception. Any inaccuracies in the human perception are the result not of selective sampling but of the data (picture data that is) not being quantitative. The mind can of course employ random sampling e.g. rapid skimming of text, and is then prone to the same errors as the computer. Note also that the human may be quite prone to spelling errors - that is why we have spelling checkers.

As I have made frequent mention of the process of recognition, I would like to restate my argument in the context of the two processes, RECOGNITION and RECALL.

1. Recognition of given data. This the computer will only ever do by a search process, and in the picture example may find even this an impossible task. The 'recognition' itself is only a simulation, with no meaning attached. I discuss 'meaning' in a later article.

2. Recall of data by association with given data (as putting a name to a face or recalling the appropriate conditions). Again the mind scores by immediately recognising the given data e.g. a staff name on a timetable, and in most instances, because of its facility with association, will identify the appropriate conditions. At least warning bells ring. What is more, the mind copes with innumerable associations effortlessly. The computer must first search in order to recognise the given data. Then it will certainly identify any associated conditions (either via direct pointer or via a further search) and apply them.

It is clear from the above analysis that a programmer wishing to break new ground needs to give careful consideration to the problems outlined before getting too involved in detailed coding of what could prove an impossible task. The user often wants the impossible - the speed and precision of the computer combined with the flexible, ad hoc decision capabilities of the mind. Where decision making is involved, you need to be sure you can identify, quantify and prioritise all the relevant factors. You can then program the computer to 'look up' the best decision. That is the easy task - writing procedures to group, invoke or bypass any combination of conditions, all with the correct degree of priority. The difficult task is to make clear to a user how all these operations may be effected. The danger is that the prospective user might well find that the task is far simpler without the 'aid' of your program.

A senior decision-maker is usually appointed for his/her experience and expertise. There will be a degree of responsibility and risk. Sensitive decisions may require skills that cannot be taught, requiring very fine appreciation of complex factors. Nothing has any real meaning for the computer: meaningless data, meaningless rules for its handling, meaningless consequences. The decision to sell millions of shares and precipitate a stock market crash has no more significance than the decision to move Pawn to K4. For this reason alone, sensitive decisions must always be in the hands of responsible, understanding humans.

The principle stated in the previous paragraph would still apply even if we created a machine that *could* simulate human thinking. In other words, we would have no use for such a machine. It is highly probable that such a machine would need to be a living organism. The *status quo* is a successful partnership - mind and computer complement one another perfectly: neither can be a substitute for the other.

This section would not be complete without some comment on the creative capabilities of a computer. The creative capabilities of a computer, as you might expect, are precisely nil. Just as a competent artist can learn to paint 'in the style of' another artist, or a musician to compose 'in the style of' another composer, so with programming expertise it is possible to cause the computer to imitate existing works of art. But this is not to create works of art. Anyone who thinks it is, mistakes the shadow for the substance. The mathematical analysis of a work of art is subsequent to the inspiration, not the instigator of it. The ability to analyse a work of art mathematically is a critical skill, not a creative one. For every creative artist there are thousands of critics. We may admire the mathematical proportions of a building or a piece of music. But it is always other senses that have first confirmed that these proportions are to be admired. The artist who attempts to create a masterpiece out of mathematical concepts is putting the cart before the horse. (Dare I quote Serialism in music?)

As a tool for the writer, artist and musician, to say nothing of the architect, engineer, designer etc., the computer has opened new vistas. It is possible to use the computer to compose/write/paint a work of art. It is *not* possible to cause the computer itself to create a worthwhile work of art. It might do so by accident though never by design, on the same principle that a team of monkeys might eventually type the works of Shakespeare.

My particular concern has been to establish the essential differences between mind and computer. The similarities are nevertheless remarkable. The processor really does calculate. It simulates awareness of the here and now, accepting input from any source that can be interpreted numerically, simulates recognition and recall, and therefore understanding. By constantly monitoring the system variables, it even simulates the subconscious, aware of the passage of time and of danger signals, albeit a limited, predefined set.

In this dissertation I have tried to avoid speculative or controversial propositions: these I reserve for a later essay, where some of the topics touched in these pages are followed through.

Draft impression © CAA Press November 1987

Reproduced by permission of the author, Bill Pearce.

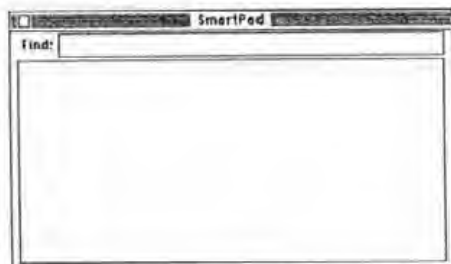
Typeset by Irene Flaxman using JusiText. Title created using MacLaser.

## SmartPad



SMARTPAD

SmartPad from Blyth Software Inc is reviewed by Keith Chamberlain.



This is a desk accessory which stores variable length textual information which can be searched

on any word or phrase throughout the text. Once installed you can cut and paste information, import text files or directly type in to create a record within a maximum length of 32k.

The power of SmartPad becomes apparent when after creating many entries, you need to find the one containing that name, address, recipe, appointment, etc. You simply type in a word or phrase to be found, the power being that this does not need to be a keyword. Also searching for "To do" can be found by either "To do" or "Do to" and this is often handy to find a phrase you cannot remember exactly.

A nice feature is the ability to import or export text files. The import option allows you to create multiple entries from a single text file by simply defining a delimiter, which can be any character or phrase up to a length of thirty characters. The reverse of this is to export the SmartPad entries to a text file again specifying a delimiter. The only problem being that you save all the current entries into a single file which if of variable length and detail makes reading into a spreadsheet or database file difficult, but creates an ideal word processor file.

Finally by searching for a specific entry

you are able to print an individual entry, which if you have set up the entry as a label format is great for printing address labels

etc. A nice feature would have been to be able to print a selection from the entry, but this was not an option on the review copy.

Although not a public domain desk accessory, this is a must for those of us who are constantly plagued by that telephone call in the midst of

work and are so used to losing that hastily scribbled note.

Another excellent product from Blyth Software.



info

Product : SmartPad  
Publisher : Blyth Software Inc  
Available from :

Price : £

Value :   
Performance :   
Documentation :



## The Perfect Duo

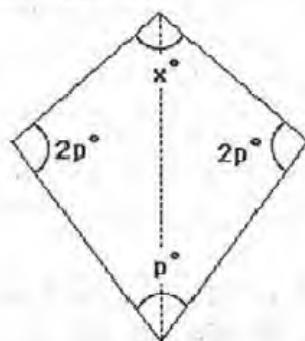


**The Perfect Duo from Mindscape is made up of The Perfect Score and The Perfect College. They are reviewed here by Norah Arnold.**

**Example**  
A. Express  $x$  in terms of  $p$ .

**Solution:** The quadrilateral can be divided into two triangles, so the sum of its angle measures is  $2 \times 180 = 360$ . Therefore,

$x + 2p + 2p + p = 360$ , so  $x + 5p = 360$  and  $x = 360 - 5p$ .



☐ The Perfect Duo from Mindscape comprises The Perfect Score, Computer Preparation for the SAT, and bundled with it 'free' The Perfect College. Unfortunately SAT means little or nothing to UK users. It stands for Scholastic Aptitude Test and as far as I can make out it is taken by American children before entering college. Obviously, a SAT preparation program is not going to have the same meaning to UK students as it does to those in the USA who must pass this Scholastic Aptitude Test before entering college. This does not mean that it is useless to UK students, however, although it may be applicable to a slightly younger age group.

The two disks and manual in this package contain a comprehensive program of study and test-taking practice. Disk 1 contains three study modules on Antonyms, Analogies and Sentence Completion. Disk 2 contains two study modules on Reading Comprehension and Maths. Also on Disk 2 are two exams, a practice Scholastic Aptitude Test (SAT) and a practice Test of Standard Written English (TSWE). The software requires a Macintosh computer with 128K or more, although it has not been tested on the SE or the Macintosh II.

It was very disappointing to find that the disks were highly protected and could not be used from a hard disk. There is a cut-down version of the system and finder on both of the two disks and the software would only run when one or other of the Perfect Score disks was used as the start-up disk.

Disk 1 contains ten different sets of questions on antonyms and they take the following format:-

**DEPRIVATION**

- A intelligence
- B restoration
- C apparition
- D reproach

There is a check box next to the four answers so that you can make your choice as to the correct antonym, or direct opposite. In the section entitled Analogies there are ten sets of questions for practice and they take the following format:-

**MAESTRO: ORCHESTRA**

- A violin: flute
- B tuba: wind
- C conductor: baton
- D playing: musically
- E principal: faculty

Similarly, there are ten different practice sets of questions for the Sentence Completion section and they take the form of sentences with one or more words missed out, in which the gaps must be filled with the most suitable choice of word.

The manual goes into very great detail as to how students should attack each type of question, making sure that even the most uncertain would feel confident of starting.

The second disk contains the Reading and Math modules and the manual is absolutely essential here. The Reading Comprehension section only presents the question and multiple choice answers on screen and you are expected to refer to the relevant reading passage in the manual. Similarly, the Maths section refers in parts to diagrams in the manual and it is a pity that they are not on screen.

Each of the five study modules can be operated in two distinct modes, Learning and Testing. In Learning mode the computer carries on a 'dialogue' with the user. Each of the user's answers is followed by an appropriate response from the computer. Learning is encouraged after every response regardless of whether the response was right or wrong. The 'free' disk The Perfect College gives a database of USA colleges and their facilities. The Perfect Score should not be rejected out of hand because it is American as there is a lot of work in there.



# MIDI Interface

Irene and Dave Flaxman bring news of a new product launched in the States - but when will we see it?

The Apple MIDI interface for the Apple IIGs and Macintosh Family of computers of personal computers has one MIDI in-plug and one MIDI out-plug, making it suitable for a broad range of musical applications.

The Apple MIDI interface measures 3-inches long by 2-inches wide and 1 1/4-inches deep. It connects to one of the computer's serial ports via Apple's standard circular eight connector. MIDI instruments are connected to the interface via two, five-pin standard MIDI cables.

MIDI-equipped instruments communicate with the computer by sending a series of numbers over the connecting MIDI cables. Each MIDI message conveys a single musical event or piece of performance information such as the notes played, how they are played and what special control devices are used to add nuances to the performance. Once the computer captures the information, it can be used as a sophisticated control or playback device to correct mistakes and experiment with different sounds and arrangements.

## Film & Video Work

Macintosh and MIDI technology are being used to synchronize music or special effects with moving images in film and video productions. In the past, a score or a set of sound effects created and sequenced to match the video events in a scene had to be painstakingly redone every time a change was made in the film or video edit.

Now the process is faster and easier using the computer and appropriate software to rearrange the sequence of sound events.

## Business & Productivity

Professional musicians are also business people. The Macintosh is used as a business tool for word processing, electronic mail, client billings, equipment inventory, stage set-ups and

many more tasks.

## The Music Market

The Apple MIDI Interface also provides new functionality for students and music enthusiasts who can learn about and experiment with music at home.

According to the American Music Conference in a study conducted in 1986, nearly half of the households in the United States own a musical instrument. All told, there are more than 26 million amateur and professional musicians in the United States. Retail sales of musical instruments were \$3.37 billion in 1986, this includes \$1.35 billion in electronic instrument sales—2.5 million keyboards estimated at \$526 million, 350,000 synthesizers estimated at \$275 million, and other electronic instruments.

## Music Education Market

Teachers use computer-aided musical instruction to enhance learning in music classes. Music education, which extends into the home, includes keyboard skills, reading music, ear training, music theory, performance and composition. Aside from music skills, there is software available that lets musicians of any level explore the music world simply for the fun of it, and students or music enthusiasts who want to hook up to a MIDI-compatible instrument, there are programs that take advantage of musical capabilities.

## Performance

In performance training, using the appropriate software, the computer can "listen" to and record input from a MIDI-equipped instrument. The com-

puter can then play the music back and show where mistakes in notes and rhythm were made.

## Music Theory

Grasping musical concepts like intervals, major and minor chords, and principles of harmony are easier when the student can use the computer for drill practice. The computer can reinforce concepts the teacher has presented. The teacher is then freer to focus on more advanced instruction and the needs of individual students.

## Composition

The computer, MIDI technology and the appropriate software allow students to enter music at any speed, compose full pieces and hear them play back at a normal speed. Music enthusiasts can create music without possessing advanced musical skills.

Using the appropriate software, music can also be printed in standard notation with proper markings.

## Sequencing

Music students, like professional musicians, can use the Apple IIGs or Macintosh, MIDI technology and the appropriate software to perform, compose, and edit an entire musical score.

## Creativity

Creativity, learning and entertainment can be an facets of an individual's experience with computer music applications. personal computer and MIDI technology are bringing new capabilities to the individual, making it easier to experiment with sound and music, and to create, control and polish music composition.

## Source

The source of the above information was the press releases given to those attending the launch of Apple's new MIDI interface. It was quite an event, but we were left asking the question: "Will we ever see this product in the UK?" Although Apple policy states that all products will be introduced simultaneously, worldwide, I'm afraid that the question was not answered!





## UPGRADING THE APPLE PART II

by Tom Wright

Well here I am still wrestling with the new machine, the competition has been quite fierce on occasion with IT determined to remind me of how thick I am and me determined not to admit to it.

The screen display still dithers from time to time and I am keeping notes of the duration and frequency of this particular unspecified feature, is anybody else having this problem with a Mac II? I have moved the Mac farther from the television and that seems to have reduced the problem somewhat. No the answer isn't to simply remove the television from the room as I like to keep an eye on news broadcasts and Apple advertisements.

My mistake in referring to the notepad as a "facility" in the last issue has been pointed out and my hand has been slapped for doing so, I admit that I should have called it a DESK ACCESSORY, my apologies to all the Mac maniacs, sorry perhaps I should have said aficionados. My final comment relative to the notepad DA is merely that I have dumped it since in its flawed condition it can serve no useful purpose for me.

One of the problems that I am experiencing is associated with the 'paper white' screen display, although most of my friends seem very pleased with it I find that after working on the machine for any length of time my eyes become quite tired. This is a problem that I do not experience on my steam powered Europlus due to the fact that the monitor display is 'negative'. When I worked in the reprographic trade I used to notice the same difference between plates and films which bore images of positive and negative original documents. The negative images produced from conventional documents were very easy on the eye when working on light boxes, etc., while the positive images which resulted from filming 'blueprints' always caused tired eyes if viewed in any volume. Perhaps one of the software

houses will provide us (me) with an option for choosing positive or negative image for working on the Mac II screen.

I was extremely pleased when the second Mbyte of RAM arrived a few weeks ago, my dealer gave it to me and assured me that it was easy to fit. When I removed the lid from the machine that evening I sat and wondered exactly where the four boards containing the extra RAM had to go, eventually I decided that they were probably destined for a location somewhere beneath the disk drives. This was confirmed by a phone call and I boldly set out to go where no Tom had gone before by removing the mounting which carries the hard and floppy disk drives. The locations when revealed were I suppose fairly easy to locate the RAM into, but the exercise aged me several years. However the RAM is now in place and the exercise is really a straightforward one, I did find the locations for a couple of the screws to be awkward when relocating the screws but I can't complain too much (be the first time Wright!) since the design appears to be of a high standard generally.

Despite the fact that I have (honestly) spent a number of hours studying the manuals that came with the machine, I ran into one problem in the form of a folder that I could not remove from the desktop. The folder in question could be placed on (in?) the wastebin but every time that I did so a message appeared telling me that the file in question could not be removed as it was locked. Now don't laugh you lot this Mac business is still very strange to me. Richard Wilday almost managed to suppress a very broad smile over this and showed me how to unlock the file in question, ho hum.

One of the oddities that I have encountered appeared when I forgot to set the display to black and white before loading a file into SuperPaint. Anyone who has seen this done will smile as they picture the

five miniature screens full of coloured 'mush' which appeared along the top of the screen. No problem I thought and accessed the control panel to change the display to black and white. The odd thing is that as soon as the control panel appeared the file that had been loaded into SuperPaint appeared properly beneath (ie overlaid by) the control panel. If any of the boffins can explain why this happens I shall be most interested.

The lighter side of the Mac II has made itself felt with a vengeance and I now have twenty six sounds in the system, whether pleased or displeased with me my machine can now let me know in a variety of ways, ranging from the supplied 'bong', through a rendering of 'taps' to cows, dogs, and various other noises including an enquiry as to whether or not someone has nibbled an unmentionable part of my anatomy.

Happily I am beginning to learn keyboard commands for various mouse controlled features, so the time wasted while fiddling with the rodent is steadily reducing. Obviously my lack of enthusiasm for the beast reflects the fact that most of my work with the machine is text handling. I understand the attractions of the thing when people spend a larger proportion of their time working with graphics, but, when I get time I shall investigate the 'tracker ball' type substitute for the rodent. My reason for intending to do this is simply that it looks as if it will offer a quicker and more positive alternative, possibly having more of the 'feel' of using a stylus. If anybody has already been down that road I shall be very interested in your comments/observations.

Apart from many hours of experimentation (categorised as playing by my wife) I have also made the machine work fairly hard. It has now handled files containing well over a thousand pages of text, in addition to various graphic exercises (the most interesting

of which was an editing exercise on a post card from Florence Nightingale, purpose being to remove the images of various dirt and age impressions on the card, as well as to darken the faded parts of Miss Nightingale's handwriting).

The worst panic to date occurred when I was trying some PD software and experienced a total lock-up of EVERYTHING (Tesseract). The only way that I could make the machine acknowledge me at all was to turn the power off and on, following which I discovered that the hard disk appeared to have expired! Well well, bless me, or words to that effect was my immediate reaction, visions of my previous life began to pass before my eyes as I imagined my daughter's reaction to this catastrophe, she had been working for hours on a Garfield graphic and wouldn't be too impressed to find that her aged sire had wiped it out. A hasty (ie., panic stricken) call to Richard resulted in use of the hard disk update routine which restored everything to good health. Reading that last bit I am beginning to wonder if I should have called this article "An Innocent (twit) Abroad", still he means well folks and if any of these 'disasters' help to prevent anybody having a near miss with a coronary it will be worth it. One of the morals of this little saga is that I shall do as Norah Arnold says in future (if I don't forget) and test all new software from other than the hard disk.

Although a sample of LQ dot matrix output had indicated that it was capable of producing documents with sales potential, I have rapidly been convinced that laser output had far better commercial prospects; for that reason I have converted the original order for an LQ to a LaserWriter SC. Experience has shown that although the SC does not have all the 'bells and whistles' it is quite capable of earning its keep and it will be upgraded as soon as the pennies have accumulated. The wider line output of the LQ is something that will have to be readdressed at some time in the future, as it is obviously a useful commercial feature. I have discovered (old hat to some) that the 300 dpi resolution of the LaserWriter is a serious constraint for some applications, but they represent a limited minority of the applications that I have examined to date and can safely be re-evaluated later (I hope).

The SC arrived a couple of days ago, together with the extended keyboard, and after collecting them I settled down with the SC and SCSI manuals to unpack and check everything. Eventually I began to actually assemble the beast until I discovered that both manuals insisted that I had to have cable terminators in the circuit, and I hadn't got any cable terminators. A hasty call to Celtip produced the statement that I didn't need a terminator, was this all part of a plot or were those kindly folk really correct in saying that I didn't need a terminator? THE bad mistake was then made by again reading both manuals very carefully, horror of horrors, as my SC would have to sit in a location several feet away from the Mac I would require cable extenders, and, according to the manuals several terminators! Another call to Celtip made me aware that they did have extenders in stock and yes I could pick them up whenever I wanted, plus further assurance that I didn't need terminators. As always full of confidence when setting out to collect technical things (ie cables) I went armed with both manuals. Arriving at Celtip I was not only assured that I didn't require terminators but that they didn't use them themselves. Eventually however, presumably in order to humour me, along with various extenders I was given a terminator which has been duly plumbed into the various lengths of cable which enable the Mac to converse with the SC. Very patient long suffering lot at Celtip, thank goodness.

I've tried a few pages of text through the SC so far and am delighted with the output, the talk about the improved blacks available from the new engine are true. When I have time to see what the SC makes of graphics I'll let you know. Now then how long will it take to make the thing earn enough for an upgrade?

As a newcomer to the general area of Macintosh/Laserwriter I am now going to have to find sources for fonts suitable for use with the SC, if anyone can recommend fonts/suppliers/dealers and give me some idea of pricing I shall be grateful. I have had one kind person offer to try and find me a source but the more the merrier for us all as I shall pass on anything that I find out. By the way the above offer was made by one of the demonstrators at the Apple2000 workshop held in Kiddermin-

ster today, anybody in the area who missed it should kick themselves as it was very well organised and extremely informative. My congratulations to Mike Davies who organised it and to all those people who helped, plus thanks to Celtip for providing the venue.

One of the changes that has accompanied the upgrade is a regular subscription to MacUser magazine (paid for by Mother Christmas) to replace my previous occasional purchase of that publication. The saga associated with actually getting my hands on the magazine was a little worrying to say the least. The cheque and subscription order were sent on December 12th 1987 (for a full 1988 subscription). Dennis Publications cashed the cheque on December 31st 1987 but I was still waiting to receive an issue of the magazine in February of this year. On February 5th I rang the circulation department and was assured that the January and February issues would be posted to me within two days. On February 15th I rang the circulation department again to tell them that I had still not received anything, indicating a degree of displeasure during my conversation with them. The January and February issues finally arrived a couple of days later, hooray!

BUT, after waiting so long for the things to arrive I was a somewhat amazed when on the same day, about two hours after the magazines arrived in fact, one of our more esteemed members turned up at my home and proceeded to pour a cup of tea all over the February issue!! All was not lost however, we went to Celtip's official opening later that day and Anne took pity on me and presented me with a replacement copy courtesy of Celtip, I now keep that copy under lock and key in a bank vault. The morale of this story appears to be that Mac users require a considerable amount of patience.



*Tom Wright is a II person - he now owns two II's. An Apple II and a Macintosh II. His regular insights into his new found machine hopefully keep us all amused!*



## FOR SALE

48k Apple II Europlus  
5 x Apple disk drives  
2 x disk controllers  
2 x fan units  
U-Micro 16k ram/Language Card  
Apple parallel interface  
Videx Videoterm 80-column card  
Microsoft Z80 softcard  
Offers to Lee Harris  
Reading (0773100) 00000000 5pm to 9pm

## FOR SALE

IIGS Specific Software  
Tower of Myraglen £25.00  
The Music Studio £25.00  
Shanghai £15.00  
Tass Times in Tonetown £15.00  
Hacker II £15.00  
Other Apple II Software  
California Games (128K) £15.00  
Bards Tale I (64K) £15.00  
MagiCalc £15.00  
Zork II £10.00  
Hitchhikers Guide £10.00  
Ultima III £10.00  
Transylvania £7.50  
The Quest £7.50  
Death in the Caribbean £7.50  
Temple of Apshai £7.50  
Full documentation and all original disks  
Part postage 50p per program (max £1.50)

Telephone Peter Green,  
Chandlers Ford (0773100) 00000000 (evenings)

## FOR SALE

Fujitsu Hi-Res Printer. 120 column dot-matrix. Parallel & Serial interfaces.  
Value about £500 - Ideal for IBM PC or compatible. Exchange for ImageWriter (II).  
Original IBM & Apple IIe software available as part of package i.e. Omnis 2or3.  
Word Perfect, MathPlan.

Please contact Gordon Owen.

(0773100) 00000000  
(0773100) 00000000  
(0773100) 00000000  
(0773100) 00000000

## Members Small Adverts are FREE.

We reserve the right to edit and or omit them. They are placed in this section in good faith. Apple2000 holds no responsibility over item advertised and buyers purchase at their own risk. Send to the P.O.Box marked "SMALL ADVERT".

## Members Small Adverts

## FOR SALE

Macintosh Plus 2MB, Qisk 21MB SCSI H/  
Disc  
External 800k drive,  
all books/boxes - as new.  
Also padded carrybag/tons of software/future  
advice freely given  
£2,500 Imagewriter poss. available

Telephone (0773100) 00000000  
(0773100) 00000000

## FOR SALE

Macintosh 512K, 400k internal drive, mouse,  
software, in vgc £800  
//e Z80 card (Cirtech) new £30;  
Citizen MSP 10E dmp 160 draft 40 NLQ as  
new still 1 yr guarantee left £280;  
Blue, Red, Green, Silver ribbons for the  
above (group 273) little used £15 the lot;  
Cirtech Champion printer I/F and lead for II+/  
e £35;  
Bards Tale for II+/e £12; Missile Defense  
II+/e £8; Galactic Wars (strategy game 2  
player II+/e £12; Microchess 2.0 II+/e £8;  
Apple Adventure II+/e £8; Bridge Partner  
(Personal Soft) II+/e £10; FastDOS  
(Wytand) II+/e £8.  
Offers considered all in vgc and can be seen  
working, all with manuals and original  
packing.

Telephone Martin on (0773100) 00000000

## FOR SALE

Apple //e enhanced, twin 5.25 drives, 1.2 MB  
Ram extended 80-Column Card with serial  
and Parallel and RGB (Video) interfaces.  
£545, could split.  
Also available - many other items including  
Mouse and publications.

Contact Mike on:  
(0773100) 00000000 (evening/weekend)  
For a full list & Details

## FOR SALE

Apple II Mouse and Interface Card £46.00  
Linnet Modem £84.00  
Symbiotic 5meg Hard Disk and Interface  
£245.00  
1Mb RamWorks clone with 512k installed  
£93.00  
Rana Elite Three 652K Drive and Controller  
£85.00  
Spectrogram RGB Card £43.00  
New - The Print Shop with colour printing  
£37.00  
New - Printrix latest version £40.00  
Pinpoint Toolkit £28.00  
Print Shop Lovers Utility Set £12.00  
143K 5.25" Disk Drive £55.00  
All the above prices include Postage.  
Apple enhanced IIe computer with Twin Disk  
II drives and controller, 64K 80 Column Card,  
NEC 12" green screen monitor, Clip-On  
Cooling Fan, etc. Offers around £420.00  
Apple II Europlus computer 64k 80 Column,  
Clock Card, Disk II drive and controller, NEC  
12" green screen monitor, Comms Card and  
1200/75 modem, etc. Offers around £220.00

Telephone Paul (0773100) 00000000

## FOR SALE

Taiwan 64K Apple II+. 2 Monitors, 2 Disc  
Drives, 2 Disc driver cards, 3 Z80 cards, 2 80  
column cards, 2 Language cards, 2 Printer  
cards, Printer buffer card, Super serial card,  
Eprom writer card, Serial Interface card,  
Virtual disc card, Spare power supply, 2  
fans, 3 joysticks, extra keyboard, 2 Monitor  
swivels, some software, 1000 spare discs,  
manuals, £450.00 ono

Telephone (0773100) 00000000 (evenings)

## FOR SALE

Paradise Systems 10 MB (Non-SCSI) Hard  
Drive for 128/512 Macintosh.  
Boxed as new, totally reliable £300 o.n.o

Contact:  
Michael on (0773100) 00000000

## FOR SALE

Macintosh 800k External Drive. Beige  
Bought September 1987  
£180 + Postage o.n.o

Contact:  
Saari Omar  
(0773100) 00000000 (daytime)

# MacSoft

Bridge House • Wellington • Somerset • TA21 0AA  
Phone 082-347-3625 • FAX 082-347-3477

Phone lines open from 10.00am to 6.00pm, Monday to Friday. Orders are post-free in UK for orders with net value over £100 (1st class recorded post). Pay by Cheque, Access, American Express or Visa. V.A.T. is not included in prices; please add when placing order. Product pricing and availability subject to change without notice. Foreign orders welcome. E&OE.

Quality Mac Software at  
Unbeatable Prices

(And if we don't post it to you in 7 days (14 for hardware), we'll take 5% off the price!)



Where you get the cheapest prices for Mac software & hardware in Britain

## SOFTWARE BARGAIN OF THE MONTH

FileMaker Plus  
**£145!!!!**

The finest form design capabilities in an easy-to-use and powerful database with many unique features. Offer valid during April 1988 only

Look out for this month's  
PRICE REDUCTIONS  
(Indicated with \*.)  
**SOFTWARE**

Adobe Illustrator	£450.00	£375.00
Altsys Fontastic+	£74.95	£45.00
Fontgrapher	£375.00	£249.00
Affinity Tempo	£90.00	£59.00
Borland International Reflex Plus	£199.95	£175.00
Sidekick	£99.95	£57.50
Turbo Pascal	£99.95	£57.50
Center Point Software Copy II Mac	£39.95	£22.00
Cricket Software Cricket Draw	£295.00	£195.00
Cricket Graph	£175.00	£117.50
Cricket Presents	£495.00	£395.00
Data Tailor Trapeze V2	£295.00	£175.00

Icon Technology MacAuthor	£199.00	£115.00
IDD MacDraft	£245.00	£165.00
Living Videotext MORE	£195.00	£149.00
MacroMind Maze Wars+	£49.95	£34.50
VideoWorks II	£195.00	£145.00
MicroSoft •Basic (Comp.)	£150.00	£99.00
•Basic (Interp.)	£75.00	£60.00
Chart	£95.00	£70.00
•Excel	£395.00	£199.00
•File	£150.00	£99.00
Flight Simulator	£45.00	£35.00
Mail 1-4 users	£195.00	£149.00
Mail 5-10 users	£345.00	£249.00
Mail 11-20 users	£495.00	£349.00
Mail 21-32 users	£645.00	£499.00
PowerPoint	£295.00	£199.00
•Word V3	£295.00	£199.00
•Works	£295.00	£149.00

MindScape Balance of Power	£26.95	£19.50
Champion Boxing	£26.95	£19.50
ComicWorks	£69.95	£49.50
Deja Vu	£26.95	£19.50
GATO	£26.95	£19.50
GraphWorks	£99.95	£54.50
Orbiter	£26.95	£19.50
ShadowGate	£26.95	£19.50
Uninvited	£26.95	£19.50

Micro Analyst Mac Zap	£60.00	£45.00
--------------------------	--------	--------

Nashoba Systems FileMaker Plus	£145.00	£295.00
-----------------------------------	---------	---------

Quark Xpress	£695.00	£499.00
-----------------	---------	---------

Silicon Beach Software Acc. Pak 1	£29.95	£15.00
--------------------------------------	--------	--------

Airborne!	£24.95	£17.50
Apache Strike	£34.95	£27.50
Beyond Dark Castle	£34.95	£27.50
Dark Castle	£34.95	£27.50
Dig. Dark Room*	£195.00	£145.00
Ench. Sceptres	£24.95	£17.50
Silicon Press	£54.95	£37.70
Super 3D	£195.00	£145.00
Sup3DEnhanced*	£325.00	£245.00
Superpaint	£99.95	£69.00
World Builder	£49.95	£37.50

Software Concepts Computer Atlas	£49.95	£35.00
-------------------------------------	--------	--------

Software Supply Power Station	£59.95	£44.00
----------------------------------	--------	--------

Suitcase	£59.95	£44.00
----------	--------	--------

Symmetry ACTA	£54.95	£39.00
------------------	--------	--------

HyperDA	£59.95	£44.00
---------	--------	--------

PictureBase	£74.95	£39.00
-------------	--------	--------

MacAmerica •Scoop	£445.00	£310.00
----------------------	---------	---------

T/Maker Click Art	£49.95	£30.00
----------------------	--------	--------

C/A PostScript	£129.95	£85.00
----------------	---------	--------

WriteNow	£125.00	£99.00
----------	---------	--------

Think Technology Capps Prime	£49.95	£37.50
---------------------------------	--------	--------

HPS Navigator	£39.95	£27.50
---------------	--------	--------

inBox	£350.00	£235.00
-------	---------	---------

LaserSpeed	£65.00	£42.50
------------	--------	--------

L/S Office	£325.00	£225.00
------------	---------	---------

LightSpeed C	£115.00	£90.00
--------------	---------	--------

LightSp Pascal	£85.00	£69.00
----------------	--------	--------

## FONTS

Adobe Typefaces Helvetica Condensed	each are £302.00	£265.00
--	------------------	---------

ITC Franklin Gothic	each are £227.00	£195.00
---------------------	------------------	---------

Palatino, ITC Bookman, New		
----------------------------	--	--

Century Schoolbook, Optima, ITC Souvenir, ITC Lubalin Graph, ITC Garamond, ITC Benguiat/ITC Friz Quadrata, Glypha, Helvetica Light/Black, Trump Mediaeval, Melior, ITC Galliard, ITC Baskerville, ITC Korinna, Goudy Oldstyle, ITC Cheltenham, Bodino, Letter Gothic, Prestige Elite, News Gothic, Tiffany, Cooper Black, Stencil/Hobo/Brushscript, and Aachen/Revue/UR/FS	each are £150.00	£125.00
--	------------------	---------

ITC Zapf Chancery/Dingbats, ITC American Typewriter/ Machine, Century Old Style Roman, and Orator	each are £120.00	£100.00
--	------------------	---------

Sonata, Carta and Park Avenue	each are £75.00	£60.00
-------------------------------	-----------------	--------

These are prices for single printers. For multiple printers, our prices are approximately twice single prices. Call for details.		
---	--	--

Casady Fluent LaserFonts	£69.95	£42.50
-----------------------------	--------	--------

## HARDWARE

Rodime Rodime SCSI hard disks are the industry standard.		
--	--	--

Built here in the UK, these drives are used by Apple themselves. You are buying the very best, with full 12-month guarantee..		
---	--	--

INTERNAL DRIVES For Mac SE and II only		
---	--	--

450RX(45Mb)	£650	£475
-------------	------	------

For Mac II only 1000RX(100Mb)	£1060	£795
----------------------------------	-------	------

--	--	--

--	--	--

## HARDWARE BARGAIN OF THE MONTH

External 20 Mb  
Rodime S20 +  
SCSI drive for

**£385!!!!**

In attractive matching unit  
that sits neatly under Mac  
Plus or SE. By popular  
demand, we're continuing  
this offer through April '88.

1400RX (140Mb)	£1295	£975
----------------	-------	------

EXTERNAL DRIVES For all Macs with SCSI port		
--	--	--

S20+ (20Mb)	£575	£385
-------------	------	------

S45+ (45Mb)	£825	£545
-------------	------	------

S60+ (60Mb)	£895	£595
-------------	------	------

S100+(100Mb)	£1195	£925
--------------	-------	------

S140+(140Mb)	£1395	£1045
--------------	-------	-------

S540+(540Mb)	£9995	£7995
--------------	-------	-------

Memory (RAM) Upgrades Guaranteed high quality memory upgrades for your Mac at prices you can't afford to turn down. Full instructions included, or send your Mac to us for fitting (£50 extra)		
--	--	--

Add 1Mb to Plus/SE,II	£249	
-----------------------	------	--

Add 2Mb to Plus/SE,II	Call	
-----------------------	------	--

Add 4Mb to Plus/SE,II	Call	
-----------------------	------	--

\*As soon as available.

\*Unless program not yet released,  
discontinued, or sale subject to  
cheque clearance.

We're not going to be undersold ... provide proof of a genuine better offer for any product listed here from anyone in the UK within 14 days of purchase and we'll refund the difference

## instant art

Ready-To-Use Graphic Disks

Gallery :	Useful pictures, borders, maps, trademarks etc.
Symbols :	Tourism, Animals, Farming, Programming etc.
Hands :	Tradesmen, Food, Leisure etc.
Food & Drink :	Illustrations of Food and Drink
Display Fonts :	Decorative lettering (inc. Music & Border Fonts)
UK Atlas :	Roads, rivers, railways, airports, counties, cities etc (Including London Underground map)

One Instant Art disk costs £29, two cost £56; three cost £81;  
four cost £104; five cost £125; and all six cost £144.

## Instant business forms

Over 40 ready-to-use business forms designed for UK users.  
Includes spaces for company logo, address, VAT no., etc.  
Specify MacPaint, PICT, or PageMaker format. Costs £49

Instant sampler disk for only £6.00

Instant Art now available as  
StackWare for HyperCard.  
Call for details.

LaserWriter-compatible fonts that download  
automatically for immediate use.

## GreyFonts

Now you can print in 9 grey shades on your LaserWriter!

Each package contains nine different grey shades for the Laser font you want.  
GreyFonts available include: Times, Helvetica, Avant Garde, Bookman, N Helvetica  
Narrow, Palatino, Symbol & Zapf Dingbats. All the usual style options available, such as  
Bold, Italic, Underline, Outline, & Shadow.  
1 GreyFont costs £49; 2 cost £94; 3 cost £134; 4 cost £169; 5 cost £195; 6 cost £224;  
7 cost £244; & all 8 cost £250

## GhostFonts

GhostFonts allow you to print LaserWriter fonts as  
background, or shaded text without outlines.

GhostFonts come in Light, Medium & Dark shades. Background printing works in  
programs allowing mixing of text & graphics, eg: PageMaker, MacDraw, SuperPaint.  
GhostFonts for the LaserWriter includes Helvetica, Times & Symbol & costs £45.  
GhostFonts for the LaserWriter Plus also includes Avant Garde, Palatino, Bookman,  
Dingbats, & Helvetica Narrow, & costs £89.

## NEW!! FractionFonts

FractionFonts allow you to include fractions  
in standard LaserWriter fonts.

FractionFonts for the LaserWriter includes Helvetica, Times & Symbol & costs £45.  
FractionFonts for the LaserWriter Plus also includes Avant Garde, Palatino,  
Bookman, Dingbats, & Helvetica Narrow, & costs £89.

All our PostScript fonts are now fully compatible  
with Mac SE, Mac II, and LaserWriter II

Get on our mailing list - hear  
about our bargains first!

There's not much time left  
to take advantage of

## TAXMAN '88

(Formerly UK TaxCalc)

Do you enjoy paying taxes?

If not, you need TAXMAN.  
Now with TAXMAN you can accurately  
calculate your own tax bill, and  
learn how to claim all the allowances  
you're entitled to.  
TAXMAN is available NOW for Mac  
and MS-DOS as templates for  
Excel(Mac) and Lotus 123 (MS-DOS),  
price £39.95. Registered users will be  
able to upgrade annually at half price.

Change the odds in your favour  
with

## TAXMAN '88

Software it costs NOT to buy!

Disclaimer: we make no warranty as to  
accuracy or fitness for purpose





# No matter which Mac you've got, we'll make it work faster.

You want more speed from your Mac. Less time waiting, more time working. Now your dream is reality whether you've a new MacII or a 128K of legend.

**How about my SE?**



Run your SE with MacII performance by slotting in the Turbo SE. Everything runs at least twice as fast: faster than many 68020 designs. A big screen attaches, and the 68881 maths co-processor option runs spreadsheets 60 to 100 times faster (and other programs using SANE).

And because we use the ultimate in compatibility (the same 68000 processor your Mac uses, only twice as fast) your Mac software won't crash. Unlike the 68020 boards. So your data is in safe hands.

**And at £449.00 that's irresistible.**

With TurboMax you get more speed plus more memory..... 2 to 3 times faster, 2MB of memory, upgradeable to 4MB.

RAMdisk contents are protected, so you can safely work on your programs and data at memory speeds. There's a superspeed SCSI and the 68881 maths co-processor option makes spreadsheets (and other SANE programmes) run 60 to 100 times faster. There's a big screen attachment, too.

Of course, it's as crash proof as the Turbo SE. Fits in minutes without modifying the Mac and it costs only **£1,195**

TurboMax also re-enhances the 512K Enhanced for an amazing performance.

**I love my 512K...**



case - the SCSI port exits from the battery compartment.

**Bigger software - bigger memory.**



To run Apple's great new software you are going to need bigger memory. For scanning, and many other programs, too. 1MB is not enough.

But you just can't risk fitting second-rate memory. You put a lot of work at stake when intermittents crash your system (as they will).

So MacMemory offers you **crash-proof** memory with MaxPlus 2x4S surface mounted megabit chip modules meeting or exceeding Apple's own standards in every respect.

You'll feel safer knowing your MacMemory enhancements use first quality chips (not the cheaper production reject units used by some others), and are 100% tested at each stage and are even given a final 72 hour burn-in in an actual Mac. No-one else takes this much trouble to give you error-free performance!

**A 4MB SE...**



MaxPlus 2x4S take your SE to 2.5MB (and onto 4MB), support all Apple standard add-ons and also plugs into Turbo SE. No modifications are required of any kind.

**Mac Plus** upgrades economically to 2MB and onto 4MB without any mods. Your every

(128K owners... we'll get you to 512K, and then add TurboMax). Connect your SCSI hard disks directly through the superspeed SCSI port. No mods to the 512K

need is catered for with different modules, including big screens.

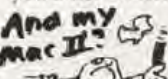
**A 4MB 512K?**



You'll love what the Max2 does for your 512K; Max2 gives 2MB, upgrades to 4MB, and works with old or new ROMs and allows a SCSI port to be fitted when you're ready.



Er... You're not alone - we started off with 128K's too! So don't send yours to the knackers yard. We'll take you to 512K - and then Max2 or TurboMax promise you a new world of speed and software.



**And my Mac II?** You need more than 1MB to do anything useful and MaxPlus 2x4S takes you to 8MB!

Remember, even your beautiful MacII will crash, no matter how fast, through intermittent if you fit not-quite-industry-standard memory.

Treat your wonder machine to MacMemory. **It's crash proof!**

Hardware is hardware. But support for it can range from 'total' to 'non-existent'.

MacEurope's is total. All the facilities you expect from a major manufacturer.

And we work closely with only the best dealers. You can expect and get the best service in the industry. (Ask our customers...)

Call Colette Fanning on **(0603) 630636** for more info, super data sheets and details of where you can see our products in action.



## MacMemory from

# MacEurope

The Granary, Trowse Bridge, Bracondale,  
Norwich NR1 2EG, England. Tel: (0603) 630636

Fax: 0603 630374



# Abaton

Abaton Technology Corporation  
7901 Stoneridge Drive, Suite 500  
Pleasanton CA 94566

**Why an Abaton Scan300/SF or Scan300/FB scanner with C-Scan 1.6  
is the only choice for graphics scanning with the Macintosh.**

## HALF TONE



## GREY SCALE

- Abaton C-Scan 1.6 software introduces TRUE grey-scale scanning for the first time for a desktop computer.
- To see how it differs from the rest, we've included an example - an image scanned from a photograph, like you've never seen it before!
- Picture 1 shows the picture at full-scale, exactly as scanned.
- In the second picture, we've expanded a small area of the same image, showing how well it's appearance is preserved even when blown up three-fold.
- Finally, the third picture blows up the image twice more, to let you see the secret of this magnificent clarity - only now just visible are the individual pixels that come together to make the 16-level (4-bit) true grey-scale image that no other scanner system can offer.
- There are no special tricks here - the picture is completely unretouched, and printed on a Linotron printer.
- And it's the only scanning system that produces images that let you use the full power of Letraset's Image Studio graphics software.



Abaton products are distributed  
in the UK exclusively by

## MacSerious

The MacSerious Company  
17 Park Circus Place Glasgow G3 6AH  
Phone 041-332-5622 Fax 041-332-3209  
Telex 777021 MACSER